#### REPORT RESUMES

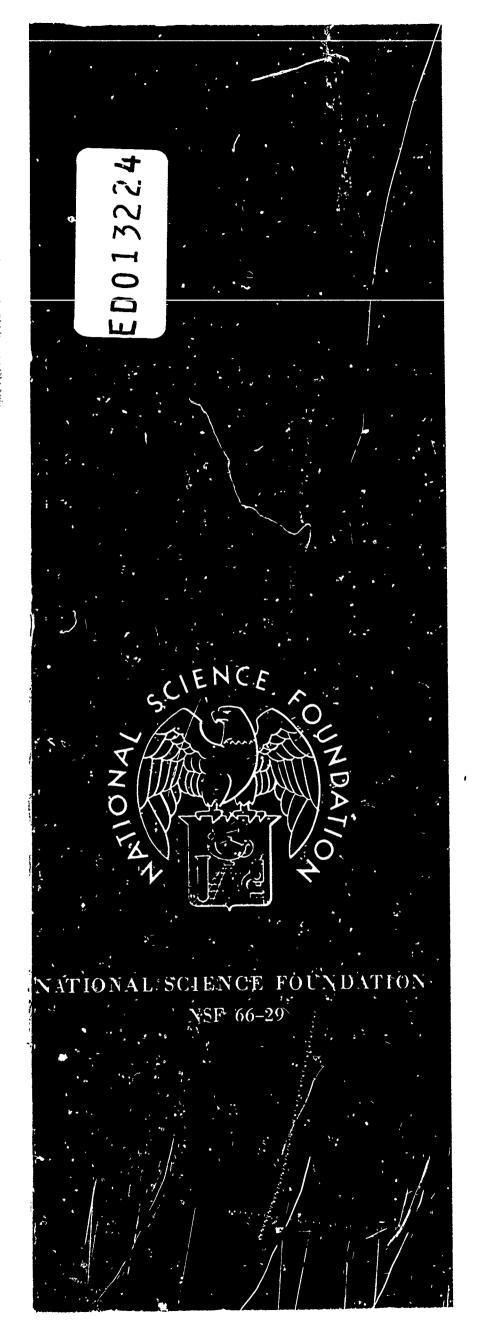
ED 013 224

SE 003 099

AMERICAN SCIENCE MANPOWER, 1964--A REPORT OF THE NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL.
BY- LEVINE, MILTON AND OTHERS
NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.
REPORT NUMBER NSF-66-29 PUB DATE 66
EDRS FRICE MF-\$1.00 HC-\$9.08 227P.

DESCRIPTORS - \*HUMAN RESOURCES, \*INDIVIDUAL CHARACTERISTICS, \*OCCUPATIONAL INFOPMATION, \*SCIENTIFIC MANPOWER, \*SURVEYS, AGRICULTURE, BIOLOGY, CHEMISTRY, COLLEGE SCIENCE, EARTH SCIENCE, ECONOMICS, EMPLOYMENT EXPERIENCE, EDUCATIONAL BACKGROUND, FEMALES, GEOGRAPHIC DISTRIBUTION, LINGUISTICS, MATHEMATICS, MALES, PERSONNEL DATA, PHYSICS, PSYCHOLOGY, SALARIES, SCIENTISTS, SCIENCE TEACHERS, NATIONAL SCIENCE FOUNDATION

INFORMATION FROM THE 1964 NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL ON THE SUPPLY, UTILIZATION, AND CHARACTERISTICS OF THE NATION'S SCIENTIFIC MANPOWER RESOURCES IS REPORTED. A QUESTIONNAIRE WAS USED TO OBTAIN DATA FROM 224,000 PERSONS INCLUDING (1) KNOWN QUALIFIED SCIENTISTS, (2) RECENT GRADUATES OF COLLEGE SCIENCE PROGRAMS, (3) MEMBERS OF PROFESSIONAL ORGANIZATIONS, (4) SUBSCRIBERS TO PROFESSIONAL JOURNALS, AND (5) NON-MEMBER REGISTRANTS OF PROFESSIONAL MEETINGS. FIELDS COVERED INCLUDED AGRICULTURE, BIOLOGY, FSYCHOLOGY, CHEMISTRY, EARTH SCIENCE, PHYSICS, ASTRONOMY, MATHEMATICS, METEOROLOGY, ECONOMICS, LINGUISTICS, SOCIOLOGY, AND STATISTICS. THE INFORMATION IS PRESENTED IN FOUR SECTIONS COVERING A WIDE RANGE OF SUBJECTS. THESE INCLUDE EDUCATIONAL BACKGROUND, EMPLOYMENT, SALARIES, AND GEOGRAPHIC DISTRIBUTION. GENERAL CHARACTERISTICS OF ALL REGISTERED SCIENTISTS ARE REPORTED IN PART I OF THE REGISTER. PART II SUMMARIZES IN MORE DETAIL THE MAJOR CHARACTERISTICS OF THE SCIENTIFIC POPULATION. FART III INCLUDES A SERIES OF SELECTED STATISTICAL TABLES THAT PERMIT COMPARISON OF RELATIONSHIPS BETWEEN TWO VARIABLES FOR A NUMBER OF SEPARATE SUBPOPULATIONS. APPENDIXES INCLUDE (1) DETAILED DATA FROM WHICH DATA USED IN OTHER PARTS OF THE REPORT WERE SELECTED, (2) A COPY OF THE QUESTIONNAIRE USED IN THE SURVEY, (3) A LIST OF SUBFIELDS INCLUDED IN EACH SCIENTIFIC AND TECHNICAL FIELD, AND (4) A LANGUAGE FAMILY LIST. A SUBJECT GUIDE TO SPECIFIC INFORMATION ON THE NUMBERS AND SALARIES OF SCIENTISTS IS INCLUDED. THIS DOCUMENT IS AVAILABLE AS NSF 66-29 FOR \$1.25 FROM THE SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402. (AG)



# AMERICAN SCIENCE MANPOWER 1964

A Report of the
National Register
of Scientific and
Technical Personnel

# AMERICAN SCIENCE MANPOWER 1964

U.S. DEPARTMENT OF HEALTH, FOUCATION & WELFARE OFFICE OF EDUCATION

A Report of the National Register of Scientific and Technical Personnel THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

NATIONAL SCIENCE FOUNDATION NSF 66-29



#### **Foreword**

This report continues the periodic reporting of data collected through the National Register of Scientific and Technical Personnel. The emphasis in this report is on presenting statistical information in forms to suit varying needs for understanding the characteristics of scientific manpower. Data supplied directly by approximately 224,000 individual scientists on a voluntary basis are tabulated in detail on education, employment, scientific specializations, and other characteristics. Of those to whom questionnaires were sent, 64 percent responded.

As a comprehensive program for the registration of scientists in the United States, the National Register is a major source of data useful for the Federal Government, industry, and higher education in formulating science policies and planning operations. The Foundation, in striving to make the National Register a more effective manpower tool, also plans to study the representativeness of scientists in the National Register in relation to the total science population, to study reasons for the failure of 36 percent to respond, and to seek means for improving response rates. In addition, a series of studies is being designed to reveal the patterns of academic training and careers of scientists. Data obtained by the National Register over the past 10 years provide materials for studies of the long-term interrelationships among the many factors involved in academic training, employment, and mobility of scientific manpower. These studies will be helpful in developing trends on the changing character of the scientific community.

The National Science Foundation gratefully acknowledges the cooperation of the Nation's scientists who voluntarily responded to the National Register as well as the cooperation of the participating scientific societies. Responsibility for the National Register of Scientific and Technical Personnel is assigned to the Foundation's Office of Economic and Manpower Studies, H. E. Riley, Head, with general supervision by Thomas J. Mills, Head, Sponsored Surveys

and Studies Section.

LELAND J. HAWORTH
Director, National Science Foundation

August 1966





#### **ACKNOWLEDGMENTS**

Milton Levine, Study Director, National Register of Scientific and Technical Personnel, planned and prepared this report with the assistance of Y. Ann Carmel and Suzanne M. Duval. George Dan Clark, Manager of the National Register Records Center, was responsible for the data-processing activities carried out at North Carolina State University, in Raleigh. The 1964 National Register was coordinated by J. James Brown. The following organizations cooperated with the National Register in 1964: American Chemical Sciety, American Economic

Association, American Geological Institute, American Institute of Biological Sciences, American Institute of Physics, American Mathematical Society, American Meteorological Society, American Psychological Association, American Sociological Association, Center for Applied Linguistics of the Modern Language Association of America, Federation of American Societies for Experimental Biology, and, through these organizations, other specialized societies.

#### CONTENTS

Introduction	Page
Registration Process	1
Scope of National Register Data	1
Comparison With Other Data	- 2
Uses of National Register Data	2
Uses of National Register Data Organization of the Report	3
Organization of the ReportSubject Matter Guide	3
	5
Part I. Graphic Highlights of 1964 National Register	11
General Characteristics of Scientists	13
Median Annual Salaries of Full-Time Employed Civilian Scientists	18
Part II. Summaries of Major Characteristics	
Scientists With Ph. D. Degree	21
Scientists With Master's as Highest Degree	23
Scientists With Bachelor's as Highest Degree	26
Scientists Employed in Educational Institutions.	29
Scientists Employed in Industry and Project	32
Scientists Employed in Industry and Business	35
Scientists Employed in the Federal Government	37
Scientists Employed in Nonprofit Organizations	39
Salaries of Full-Time Employed Civilian Scientists	41
Highest Degree	41
Age	41
Type of Employer	42
Primary Work Activity	42
Years of Professional Experience	43
Geographic Location of Scientists	44
Selected States	44
Selected Standard Metropolitan Statistical Areas	44
Scientists With Foreign Language Knowledge	45
Scientific Field	45
Foreign Language Proficiency	45
Scientists With Foreign Area Knowledge	46
Scientific Field	46
Scientists Receiving Federal Support	47
Scientific Field.	47
Highest Degree	47
Type of Employer.	<b>4</b> 8
women scientists.	49
Scientific Field	49
Highest Degree	49
Type of Employer	<b>5</b> 0
Frimary Work Activity	<b>5</b> 0
lears of Professional Experience	<b>5</b> 1.
Salaries of Full-Time Employed Women Scientists.	51

V



VI

#### CONTENTS

	Page
Part III. Selected Tables	53
Appendices	
A. Detailed Statistical Tables	81
B. 1964 Questionnaire and Specialties List	205
C. Subfields Included in Each Scientific and Technical Field	213
D. Language Family List Used by the National Register in 1964	215
E. Foreign Area List Used by the National Register in 1964	217



#### Introduction

This publication brings together information from the 1964 National Register of Scientific and Technical Personnel on the supply, utilization, and characteristics of the Nation's scientific manpower resources. The information is presented in four progressively detailed sections of statistical summaries covering a wide range of subjects, including education, employment, salaries, and geographic location of U.S. scientists. The 1964 National Registration is one of a series conducted by the National Science Foundation to make available timely information on qualified personnel in critical science fields. Earlier studies were conducted for 1954, 1956–58, 1960, and 1962.

To make the most effective use of the data in this publication, the reader should be aware of the collection and analysis procedures of the National Register, and how the statistical data are presented in this report. These features are described in this introduction.

#### Registration Process

The National Register of Scientific and Technical Personnel is maintained as a cooperative undertaking of the National Science Foundation and the scientific community, as represented by the scientific professional societies. Within this framework the Foundation develops uniform standards and procedures, and the cooperating professional societies undertake to identify and locate qualified scientists to insure the most complete coverage possible of eligible personnel. Scientists are considered eligible for inclusion in the National Register if they have "full professional standing," as determined by the appropriate scientific society, whether or not they are members of a professional society.

The eligibility criteria vary among the societies, and in some fields the scope for inclusion is broad. For example, the American Chemical Society considers a person with a bachelor's degree in chemistry, and employed in a position requiring a knowledge of chemistry, a qualified chemist. In the field of experimental biology, on the other hand, the Federation of American Societies for

Experimental Biology considers as fully qualified only those who hold the doctorate and have several years of research experience. These varying standards should be kept in mind when comparing the numbers of individuals in the different scientific fields.

In an attempt to obtain complete coverage of the scientific community, all known qualified scientists were requested to respond to the National Register questionnaire (appendix B). Also included in the mailing lists are potentially qualified persons, such as recent graduates with science baccalaureate degrees, subscribers to professional publications, and nonmember registrants at professional meetings.

In 1964, society mailing lists included 440,000 names of professional society members and others identified as having a technical interest in one of the natural or selected social science fields within the scope of the National Register. Duplicate names identified subsequently reduced this list to approximataly 415,000 individuals. Of this number, 265,000 returned questionnaires, and 150,000 were nonrespondents. Those providing incomplete information or not meeting registration criteria totaled 41,090; thus, 224,000 persons are represented in the data reported in this study. In proportionate terms, 64 percent of the individuals on the lists compiled by the cooperating societies returned questionnaires, and 15 percent of the returned questionnaires were incomplete or lacking in full professional qualifications.

To determine the characteristics of the non-respondents, a sample based on geography and discipline has been developed and plans are underway to conduct a field study. Until this study has been completed, the degree to which the respondents are representative of the entire scientific community is uncertain.

The coverage of the National Register has been continually improving, and it is estimated that the 1964 registration included over 90 percent of the Nation's science doctorates. Although the proportion varies in different scientific areas, it is

believed that about 75 percent of those qualified for inclusion are in the National Register.

#### Scope of National Register Data

In 1964 the fields covered by the National Register included the life and physical sciences and, for the first time, selected social science fields. Specifically, agricultural and biological sciences and psychology are included in the life sciences. Physical science coverage included chemistry, earth sciences, physics, astronomy, mathematics, and meteorology. The social sciences included economics, linguistics, and sociology. The field of statistics included individuals from both the natural and social sciences.

Respondents reported areas of scientific competence based on both education and work experience, professional identification (e.g., biologist, chemist, or physicist), major subject of highest degree, and current field of employment. The principal L is for classifying National Register data in this report was the field of greatest scientific competence as reported by the respondent. This basis was used on the assumption that an individual's field of specialization has more stability over an extended period of time, whereas the major subject of academic training alone may not take into account the influence of work experience. Moreover, the employee's job title may not be sufficiently indicative because of variations in definitions and methods of classifying jobs. Professional identification may rest on any of these factors and, at best, tends to represent the individual's personal view at any given time. Tables 46, 47, and 48 show numbers of scientists reporting highest level of competence in each scientific or technical field and, in turn, professional identification, major academic subject, and field of employment.

Approximately 1,100 specific specialties (appendix B) were grouped into some 100 subfields and, in turn, 13 major scientific and technical fields (appendix C). Since the data are presented at both field and subfield levels, various combinations can be chosen to make up other major fields. Thus, the characteristics of persons in biochemistry can be studied independently or as a component in the field of either biology or chemistry. There are indications from the responses to the 1964 National Register that some individuals who were trained in one scientific field reported specialties in other fields and were employed in

still another. A special study of these data will be undertaken at a later date.

#### Comparisons With Other Data

The National Register count of scientists differs from other published estimates (e.g., Bureau of the Census and Bureau of Labor Statistics) principally because of differences in fields included, reporting methodology, definitions, and time references, in addition to the nonresponse element previously noted.

The 1964 National Register included only those in selected social sciences in addition to the traditional natural science fields. Other published estimates frequently include among the social scientists those in anthropology, political science, and history, which were not included as separate fields in the 1964 registration. Anthropologists will be included for the first time in the 1966 registration data.

The Bureau of Labor Statistics estimates are based upon an employer-reporting "working as" methodology. Employer reports of scientists are added together to provide an estimate based on BLS occupational definitions. However, the employing establishments' classification practices. in adhering to these definitions, are far from uniform, and may be said to produce statistical totals which conform to a payroll classification system rather more closely than to a scientific qualifications system. There is also an element of duplication to the extent that scientists are engaged in more than one job. The National Register method of collecting information from the individual scientists permits the removal of duplications and seems likely to assure that only qualified scientists are counted.

Estimates based on employer reporting usually define scientists as those whose jobs require at least a science baccalaureate degree or "equivalent training" and who are engaged in a scientific activity. Sometimes such counts are further limited to those engaged in research and development. The National Register qualifies a scientist in terms of "scientific competence" and he is further evaluated in terms of professional standing within his field by the appropriate professional society.

Time reference differences are important in some comparisons. For example, the Census of Population data on scientific occupations are ordinarily available only at decennial intervals. Periodic sample census surveys of households are

useful in providing data on large segments of the population, but ordinarily provide insufficient occupational detail to compare with other counts of scientists.

The three systems for collecting manpower information (i.e., individual, employer, and household) are designed to meet different needs and do not count exactly the same groups. Comparability among statistics available from these sources is affected by the reasons cited above and differences in counts are sometimes large, as shown in the following comparisons:

National Register	224, 000	Natural and selected
(1964).		social scientists.
Bureau of Labor	361, 000	Natural scientists
Statistics (1963).		only.
Bureau of the Census	275, 000	Natural and social
(1960).		scientists.

Plans to make the National Register data a more effective manpower tool for statistical purposes provide for comparisons of data collected through the employer and household approaches. Such studies should provide a basis to understand better the relationship of manpower information collected via these different approaches. As more experience is gained with these data, it will be possible to narrow these differences and explain them in greater detail.

#### **Uses of National Register Data**

The National Register of Scientific and Technical Personnel is a major source of data for studies underlying the development of national science policy. Both the Congress and the executive department agencies have sought National Register data for information on the geographic distribution of support for research and education in relation to manpower resources, the work activities of scientists, the mobility of scientific personnel, etc. Selected analyses from the National Register directed toward specific fields of science have been published in congressional reports and in professional and commercial publications. Summary findings comparing the 1964 salaries and professional characteristics of U.S. scientists in the different fields of science have been available for general use since December 1964.

Registrations, which rose from 127,000 to 224,000 in five successive registrations from 1954 to 1964, now provide information on the scientific

specializations, work activities, level of education, and other characteristics of scientists over a 10-year period. Longitudinal analyses, now being planned to trace the careers of individual scientists recorded in these successive registrations, will throw further light on the geographic mobility of scientists, the regional location of advanced degree manpower, and work history patterns.

#### Organization of the Report

This report provides National Register data in four parts: a broad perspective in part 1, with more specific, although selective, tabulations in parts II and III, and the detailed tabulations in appendix A. Administrators and science managers may be particularly interested in the presentations in part I and the summary of major characteristics in part II. Investigators seeking detailed information should look to the data in part III and the appendix tables.

The highlights of the 1964 National Register, in part I, show general characteristics of all registered scientists—such as scientific field, highest degree, age, work activity, years of professional experience, employment status, type of employer, geographic location, and salaries.

Part II summarizes in more detail the major characteristics of the 1964 scientific population. Subpopulations, such as those based on highest degree (doctor's, master's, bachelor's) and type of employer (industry, education, government, nonprofit), are shown separately.

Part III includes a series of selected statistical tables that permit comparison of relationships between two variables for a number of separate subpopulations.

In appendix A, each detailed statistical table shows relationships among three variables. The appendix tables provide detailed National Register data from which selected data were presented in earlier parts of the report.

The Subject Matter Guide (pages 4-9) shows where in this report to locate specific kinds of information on the numbers and salaries of scientists.

The questionnaire and specialties list used in 1964 are reproduced in appendix B. The subfields included in each scientific and technical field are presented in appendix C. A language family list is provided in appendix D and a list of foreign areas in appendix E.



### SUBJECT MATTER GUIDE

	NUMBER	SALARY
	OF SCIENTISTS	OF SCIENTISTS
ACADEMIC RANK, see University and College Teachers by Academic Rank Academic Year Salary Base, see Salary Base for University and College Teachers Age:	Page	Page
Highest degree	23, 26, 29, 57	
Median annual salary		41
Scientific field		61
Highest degree	85	
Primary work activity	108	
Type of employer	98	115
Subfield	174	
Type of employer	32, 35, 37, 39, 59	
CALENDAR YEAR SALARY BASE, see SALARY		
BASE FOR UNIVERSITY AND COLLEGE		
TEACHERS		
EMPLOYMENT STATUS:		
Highest degree	24, 27, 30, 58	
Scientific field	88	
Scientific field	57	
FEDERAL SUPPORT:		
Government program:		
Highest degree	47, 74	
Primary work activity	75	
Scientific field	74	
Highest degree	1	
Primary work activity	190	
Type of employer	186	
State	76	
Type of employerScientific field	75	
Type of employer		
FIELD OF EMPLOYMENT:	48	
Scientific field	90	
FOREIGN AREA KNOWLEDGE (see appendix E	00	
for list of foreign areas):		
Scientific field	46, 72, 170	
Foreign Language Knowledge (see appendix	10, 12, 110	
D for list of foreign languages):		
Proficiency	45, 72, 168	
Scientific field	45, 71, 164	
	10, 11, 101	



	NUMBER OF SCIENTISTS	SALARY OF SCIENTISTS
GENERAL CHARACTERISTICS OF LC C	Page	Page
GENERAL CHARACTERISTICS OF U.S. SCIENTISTS GOVERNMENT PROGRAM, SEE FEDERAL SUPPORT,	56	
Government program		
Highest Degree:		
Age	02 06 00 55	
Bachelor's degree holders	23, 26, 29, 57	1
Doctorate holders	29-32	
Employment status	24, 27, 30, 58	
Federal Support and Government program	47, 74	
Major subject and scientific field	80	
Master's degree holders	26-28	
Primary work activity	25, 28, 31, 58	
Secondary work activity at universities	_0, <b>_</b> 0, 01, 00	
and colleges	200	
Scientific field	23, 26, 29, 57	
Age	85	,
Employment status	88	
Government program	182	
Major subject	80	
Primary work activity	93	
Students, part-time.	196	
Type of employer	91	113
University and college teachers by aca-		
demic rank	106	
Women	49, 78	
Years of professional experience	96	
Standard Metropolitan Statistical Area	68, 138	155
State	64, 125	129
Students, part-time, and scientific field	196	
Subfield Type of employer	172	
Universities and colleges, primary work	24, 27, 30, 58	63
activity, and secondary work activity	200	
University and college teachers by aca-	200	
demic rank	94	
Women and scientific field	34	
Years of professional experience	′ 1	
MAJOR SUBJECT OF HIGHEST DEGREE:	25, 28, 31, 59	
Scientific field	80	
MEDIAN ANNUAL SALARY, see pages listed in		
salary column		
PRIMARY WORK ACTIVITY (see also SECONDARY		
WORK ACTIVITY):		
Age and scientific field	108	
Federal support and Government program_	75	
Highest degree	25, 28, 31, 58	
Secondary work activity at universities	, = -,,, -	
and colleges	200	
•	-	

ERIC Full Track Provided by ERIC

	NUMBER OF SCIENTISTS	SALARY OF SCIENTISTS
PRIMARY WORK ACTIVITY—Continued	Page	Page
Median annual salary		42
Scientific field		62
$f Age_{}$		
Government program		
Highest degree	93	
Secondary work activity at universities and colleges		
Students, part-time	196	
Type of employer		110
Women	78	118
Years of professional experience		
Secondary work activity and highest	111	
degree at universities and colleges	900	
Secondary work activity and scientific	200	
field at universities and colleges	107	
	197	
Standard Metropolitan Statistical Area State	,	161
		131
Students, part-time, and scientific field		
Subfield		
Type of employer	, , , , , , , , , , , , , , , , , , , ,	63
Women	50	
Years of professional experience and		
scientific field	111	
Professional Identification:		
Scientific field	79	
SALARY BASE FOR UNIVERSITY AND COLLEGE		
TEACHERS:		
Scientific field and academic rank		123
SALARY DISTRIBUTION:		
Scientific field		61
Scientific Field:		
Age		61
Highest degree	85	~
Primary work activity		
Type of employer	98	
Employment status	57	
Highest degree	88	
Federal support		
Government program	74	
Highest degree	182	
Primary work activity	190	
Type of employer	186	
Field of employment		
Foreign area knowledge		
Foreign language knowledge		
Government program		
Highest degree	182	

	NUMBER	SALARY
	of Scientists	OF SCIENTISTS
		SCIENTISTS
Scientific Field—Continued	Page	Page
Government program—Continued		
Primary work activity	190	
Type of employer	186	
Highest degree, see Highest Degree,	160	
scientific field		
Major subject of highest degree	80	
Primary work activity, see Primary Work	00	
ACTIVITY, scientific field		
Professional identification	79	
Salary base and academic rank for uni-	• •	
versity and college teachers		123
Salary distribution		61
Secondary work activity and primary work		01
activity at universities and colleges	197	
Sex	77	
Standard Metropolitan Statistical Area	67, 132	148
State	64, 124	128
University and college teachers	202	120
Students, part-time:	202	
Highest degree	19ö	
Primary work activity	196	
Type of employer	196	
Type of employer, see Type of Employer,	130	
scientific field		
Universities and colleges, primary work ac-		
tivity and secondary work activity	197	
Jniversity and college teachers:	10.	
Highest degree and academic rank	106	
Salary base and academic rank	100	123
State	202	51
Women	49	01
Highest degree	49, 78	
Primary work activity	78	
Type of employer	78	
Years of professional experience	79	
Years of professional experience		62
Highest degree	96	
Primary work activity	111	121
Type of employer	104	
SECONDARY WORK ACTIVITY (see also PRIMARY		
Work Activity):		
Highest degree and primary work activity		
at universities and colleges	200	
Scientific field and primary work activity		<b> ~ ~ ~</b>
at universities and colleges	197	
STANDARD METROPOLITAN STATISTICAL AREA:		<b></b>
Highest degree	68, 138	155
•	, 1	

	NUMBER	SALARY
	OF SCIENTISTS	OF COMPARISONS
	SCIENTISTS	SCIENTISTS
STANDARD METROPOLITAN STATISTICAL AREA	Page	Page
—Continued		•
Median annual salary	44 70	
Primary work activity	, , , , ,	44, 70
Scientific field	1	161
Type of employer		148
STATE:	- 68, 141	158
Government program Highest degree	- 76	
Madian annual calamy	ļ.	129
Median annual salary	44, 66	44, 66
Primary work activityScientific field		131
	- 64, 124	128
University and college teachers		
Type of employer		130
University and college teachers by academic		
rank	203	
STUDENTS, PART-TIME:		
Highest degree and scientific field	196	
Primary work activity and scientific field	. 196	
Type of employer and scientific field	196	
Subfield (see appendix C for list of subfields):		
$f Age_{}$	174	
Highest degree	172	
Median annual salary		73
Primary work activity	178	• •
Type of employer	176	
Years of professional experience	180	
Type of Employer:		
Age	50	
Educational institutions	32–34	
Federal Government	37, 38	
Federal support	48	
Government program	75	
Highest degree	24, 27, 30, 58	
Industry and business	!	63
Median annual salary	39, 30	
Nonpresit organizations	20.40	42
Primary work activity	39, 40	
Scientific field	60	63
Age	I I	62
Government program	98	115
Highest degree	186	
Primary work activity		113
Students part time	101	118
Students, part-time	196	
Women	78	
Years of professional experience	i i	121
Standard Metropolitan Statistical Area	i	158
State	65, 126	130

		·
	NUMBER	SALARY
	OF	OF
	SCIENTISTS	SCIENTISTS
	Page	Page
Type of Employer—Continued		
Subfield	176	
Women	50	
Years of professional experience	33, 36, 38, 40, 60	63
University and College Teachers:		
Academic rank:		! 
Highest degree	34	
Scientific field	106	
Scientific field and salary base		123
State	203	
Scientific field and State	202	
Women Scientists:		
Highest degree and scientific field	49, 78	
Primary work activity	50	51
Scientific field	49, 77	
Primary work activity		
Type of employer		
Years of professional experience		
Type of employer	50	
Years of professional experience	51	
Work Activity, see Primary Work Activity		
and Secondary Work Activity		
YEARS OF PROFESSIONAL EXPERIENCE:		
Highest degree	25, 28, 31, 59	
Median annual salary		43
Scientific field		62
Highest degree	96	
Primary work activity		
Type of employer	1	121
Women		
Subfield		
Type of employer		63
Women		
	•	•



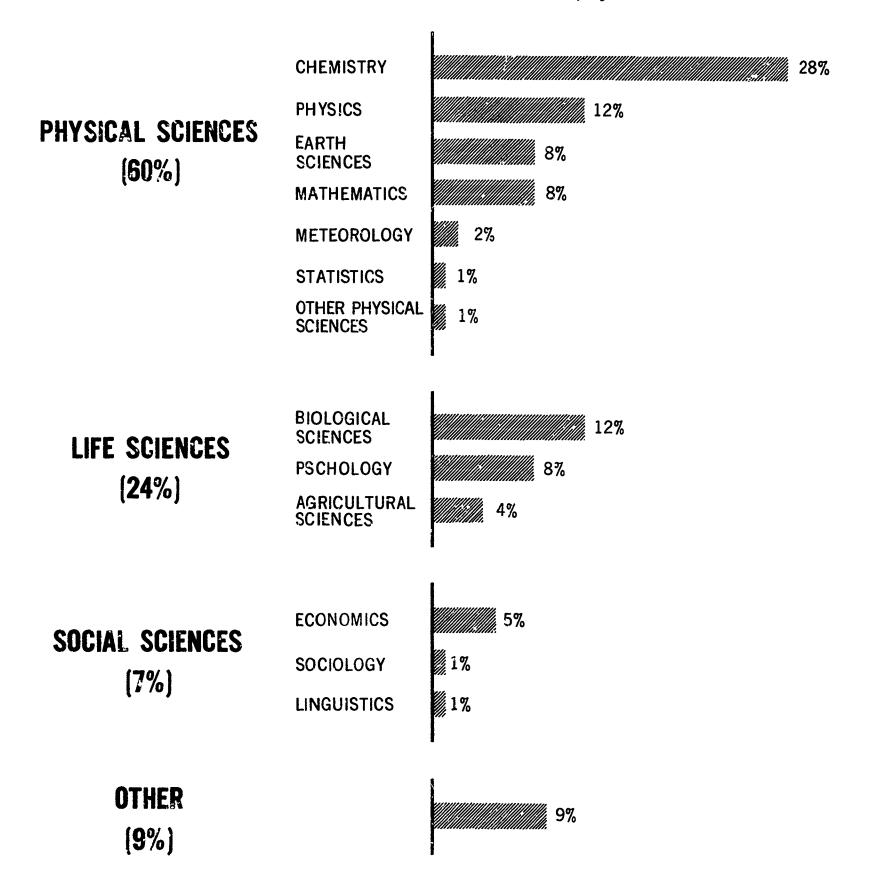
PART I

Graphic Highlights of 1964 National Register

- Percent details shown in these charts may not add to totals because of rounding.
- Numerical basis for percentages was the total 223,854 scientists in the National Register of Scientific and Technical Personnel, 1964.

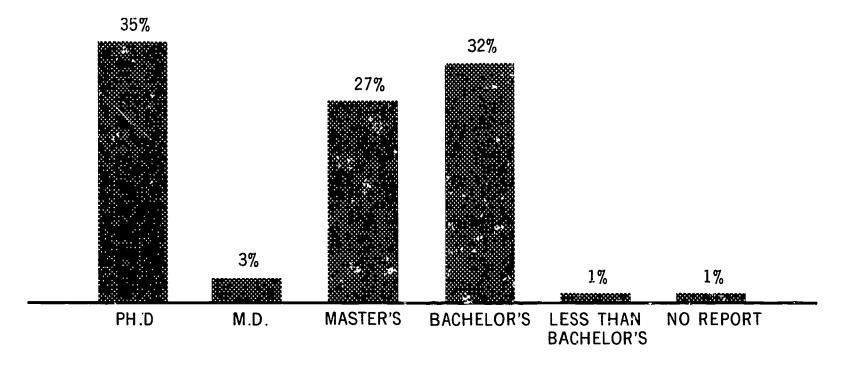
#### SCIENTIFIC FIELD

• Almost two-thirds of the scientists were in the physical sciences.

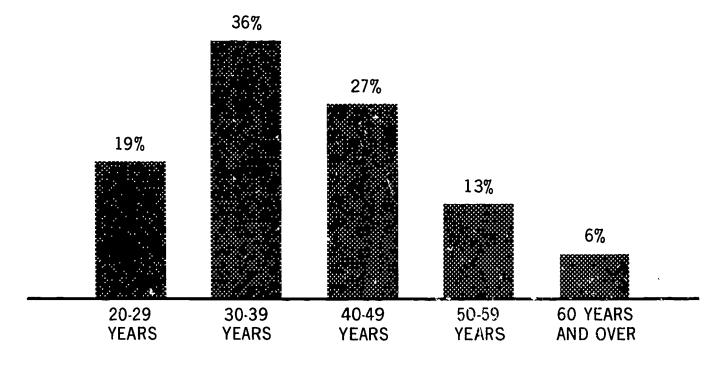


#### HIGHEST DEGREE

• More than one-third of the scientists had a Ph.D.



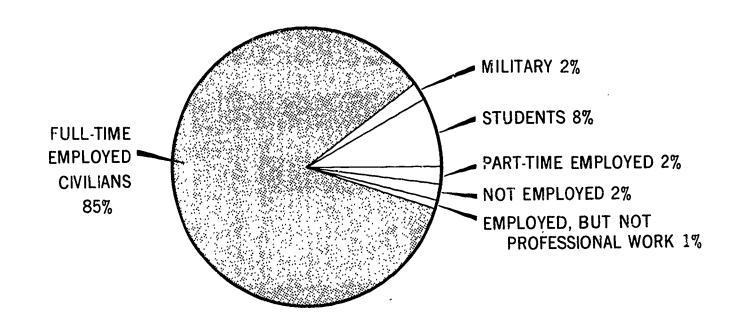
**AGE**The median age for scientists was 38 years.





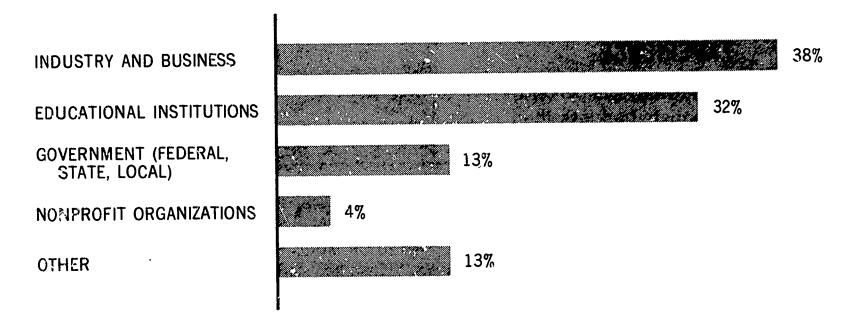
#### EMPLOYMENT STATUS

• Eighty-five percent of the scientists were in full-time civilian employment.



#### TYPE OF EMPLOYER

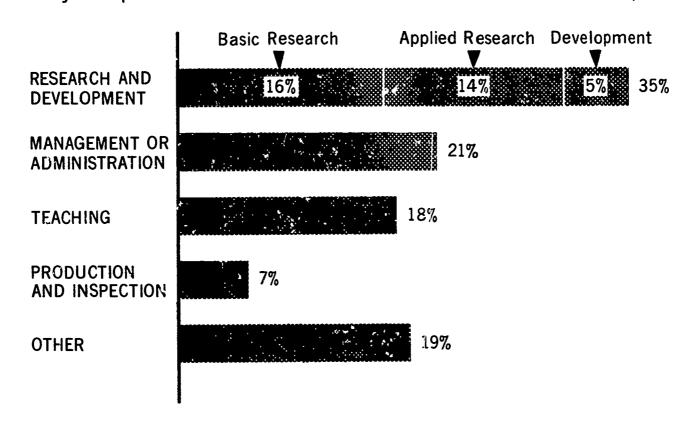
 Educational institutions and industry and business employed 70 percent of the scientists.





#### **WORK ACTIVITY**

•Thirty-five percent of the scientists were in research and development.

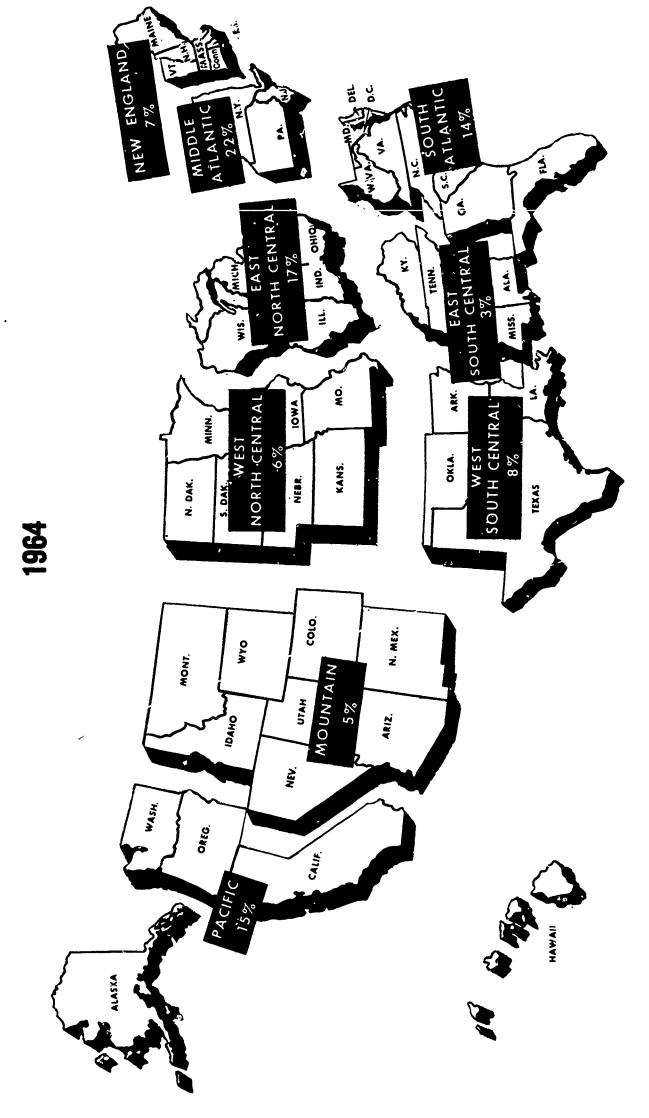


## YEARS OF PROFESSIONAL EXPERIENCE

More than one-half (59 percent)
 of all scientists had less than
 15 years of professional
 experience.

LESS THAN 5 YEARS	20%
5 TO 9 YEARS	20%
10 TO 14 YEARS	19%
15 TO 19 YEARS	12%
20 OR MORE YEARS  NO REPORT	6%

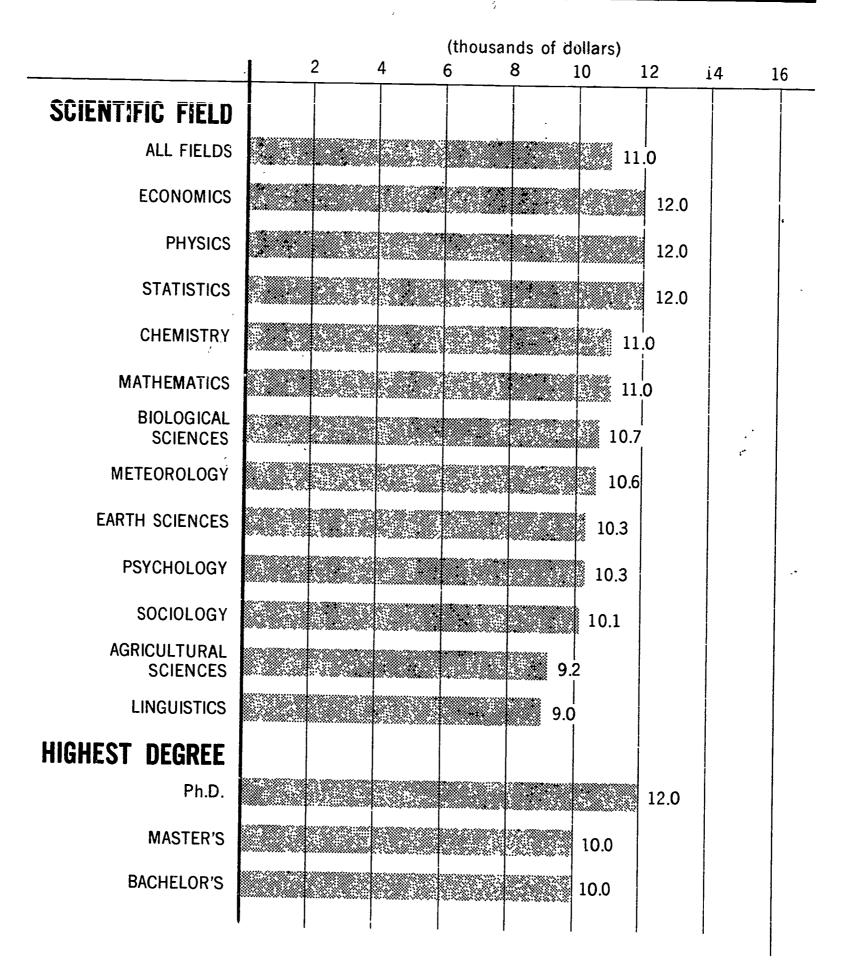
# DISTRIBUTION OF SCIENTISTS BY U.S. GEOGRAPHIC DIVISION



FOREIGN AREAS AND NO REPORT, 2%

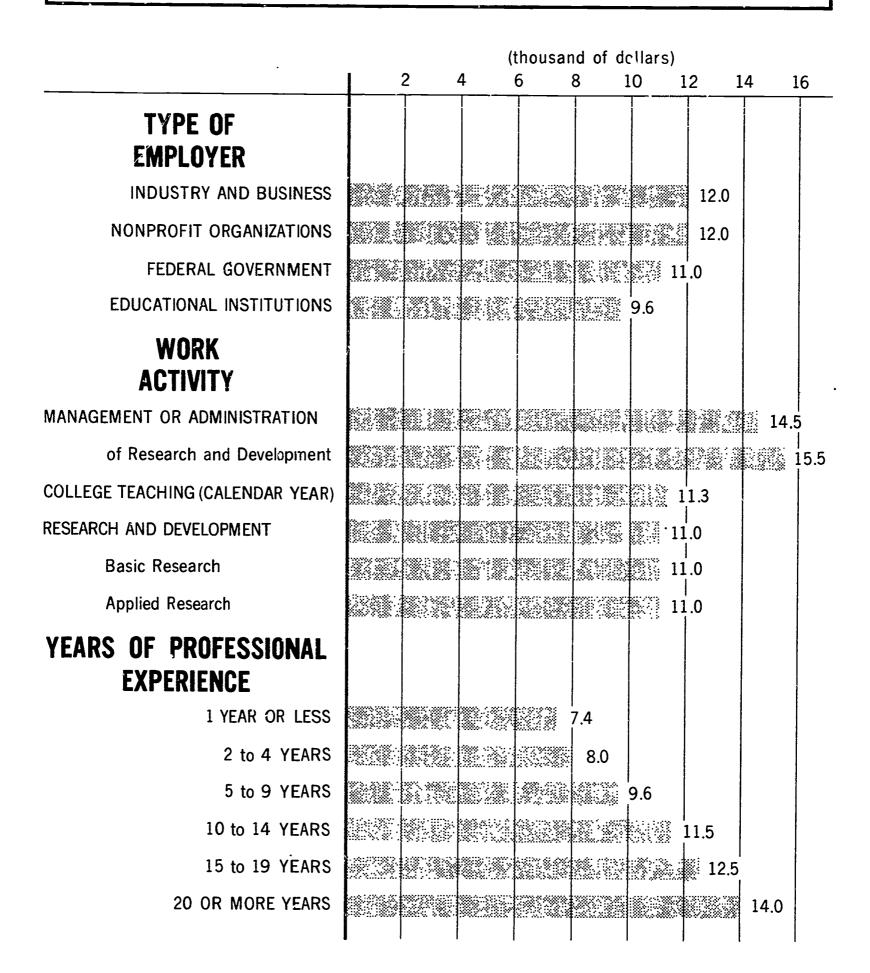
SOURCE: NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964

## MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS



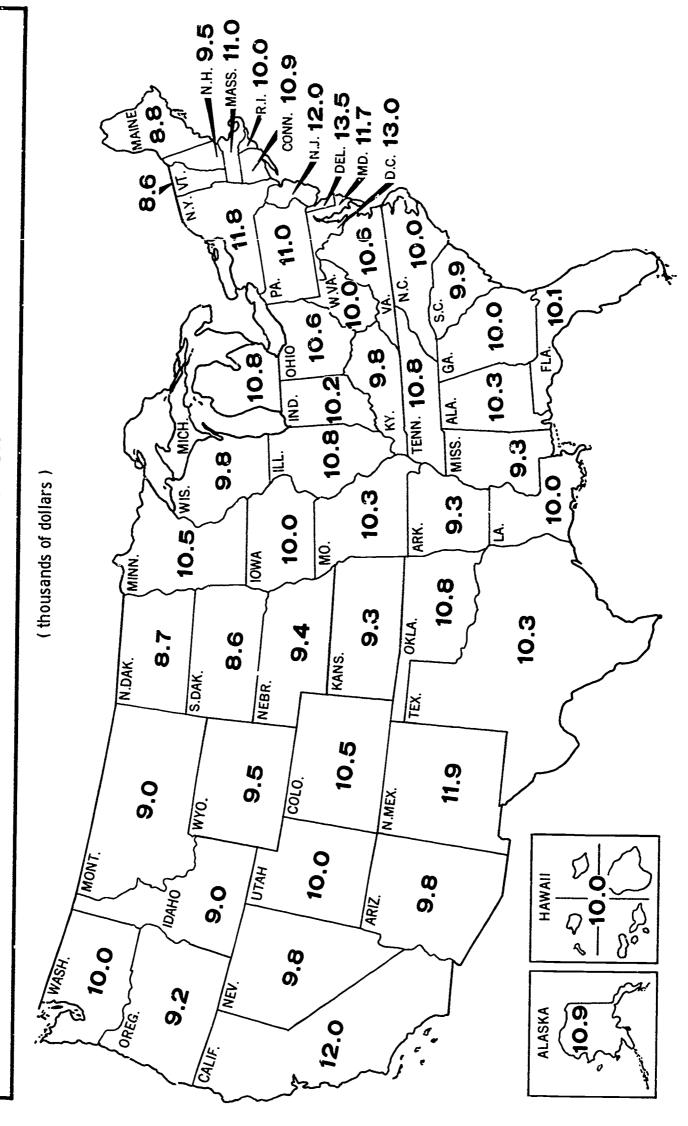


## MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS





# MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS STATE DISTRIBUTION



SOURCE: National Register of Scientific and Technical Personnel, 1964

# PART II Summaries of Major Characteristics



In all tables in this section, percent detail may not add to totals because of rounding.

ERIC Full Text Provided by ERIC

#### SCIENTISTS WITH PH.D. DEGREE

Scientific Field • Doctorates were held by 81 percent of scientists in sociology and by 65 percent of those in psychology.

		Ph.D. degree holder		
Field	Total registrants	Number	Percent of total	Percent
All fields	223,854	79,372	35	100
Chemistry Earth sciences Meteorology Physics Mathematics Agricultural sciences Biological sciences Psychology Statistics Economics Sociology Linguistics Other fields	63,053 17,907 5,510 26,698 17,411 9,526 27,135 16,80 2,843 12,143 2,703 1,351 20,770	21,789 3,578 479 10,286 4,603 2,367 13,355 10,843 804 5,091 2,179 729 3,269	35 20 9 39 26 25 49 65 28 42 81 54	27 5 1 13 6 3 17 14 1 6 3

Age • Of scientists holding the Ph.D. degree, 25 percent were less than 35 years old.

The percentage of scientists with the doctorate increased with age, reaching 56 percent of those age 70 and over.

		Ph.D. degree holder		
Age	Total registrants	Number	Percent of total	Percent
All ages	223,854	79,372	35	100
20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 50 - 54 55 - 59 60 - 64 65 - 69 70 and over No report	8,247 34,102 39,896 40,148 35,831 24,726 16,921 11,308 6,966 3,428 1,992 289	47 5,704 14,142 16,167 14,796 10,220 6,942 4,998 3,392 1,759 1,111 94	1 17 35 40 41 41 41 44 49 51 56 33	- 7 18 20 19 13 9 6 4 2





#### SCIENTISTS WITH PH.D. DEGREE

**Employment Status** • Almost all doctorate holders (94 percent) were in full-time civilian employment.

	Ph.D. degree holder		
Employment status	Number	Percent	
All registrants	79,372	100	
Full-time' employed	75,275	95	
Civilian	74,674	94	
Military	601	1	
Part-time employed	1,352	2	
Students	763	1	
Part-time employed	513	1	
Not employed	250	-	
Employed, but not			
protessional work	334	-	
Not employed 9/	1,531	2	
No report	117	~	

Type of Employer • Ph. D's constitute 54 percent of the scientists employed by educational institutions, and 47 percent of those employed by nonprofit organizations.

The employers of over one-half (53 percent) of the doctorate holders were educational institutions.

		Ph.D. degree holder			
Type of employer	Total registrants	Number	Percent of Total	Percent	
All registrants b/	223, 854	79,372	35	100	
Educational institutions S	77,727	42,112	54	53	
Federal Government d/	23, 405	6,717	29	8	
Other Government 2	7,472	1,969	26	î	
Militory	5, 522	649	12		
Nonprofit organizations	8,722	4,056	47		
Industry and business	84, 42	19,979	24		
Self-employed	4,277	1,344	31	2	
Other	1,434	516	36	1	
No report	1,257	249	20	-	

Includes retired persons, housewives, etc.

Source -- National Register of Scientific and Technical Personne!, 1964.

includes universities, colleges, and secondary school systems.

There were 1,781 doctorates not employed, including retired persons, housewives, students, etc., constituting 2 percent of all doctorates and 19 percent of all registrants not employed.

d/Includes State, local, regional, and international agencies.

#### SCIENTISTS WITH PH.D. DEGREE

Primary Work Activity • Of doctorate holders, 39 percent were engaged primarily in basic or applied research, and 29 percent reported teaching as their primary work.

	Fin.D. degree holder		
Primary work activity	Number	Percent	
All activities 4	79,372	100	
Research and development	31,674	40	
Basic research	(20,343)	(26)	
Applied research	(10,362)	(13)	
Management or administration	15,244	19	
Management or administration	·		
of research and development	(10,732)	(14)	
Teaching	22,673	29	
Production and inspection	723	1	
Other	5,430	7	
No report	1,847	2	

Years of Professional Experience Of the Ph. D. 's, 15 percent had less than 5 years of professional experience.

	Ph.D. degree holder		
Years of professional experience	Number	Percent	
All years	79,372	100	
l year	2,191	3	
2 to 4 years	9,447	12	
5 to 9 years	15,610	20	
10 to 14 years	16,769	21	
15 to 19 years	9,837	12	
20 or more	22,446	28	
No report	3,072	4	



There were 1,781 (2 percent of doctorates) not employed, including retired persons, housewives, etc.

# SCIENTISTS WITH MASTER'S AS HIGHEST DEGREE

Scientific Field Master's degrees were held by 43 percent of the registrants in mathematics and by 40 percent of those in statistics.

		Master	r's degree holde	r
Field	Total registrants	Number	Percent of total	Percent
All fields	223, 854	61,222	27	100
Chemistry Earth sciences Meteorology Physics Mathematics Agricultural sciences Biological sciences Psychology Statistics Economics	63,053 17,907 5,510 26,698 17,411 9,526 27,135 16,804 2,843 12,143	12,229 5,829 1,137 8,352 7,464 2,676 5,028 5,464 1,133 4,204	19 33 21 31 43 28 19 33 40	20 10 2 14 12 4 8 9 2 7
Sociology Linquistics Other fields	2,703 1,351 20,770	434 407 6, 865	16 30 33	1 1 11

Age Of scientists holding the master's degree, 23 percent were less than 30 years old.

		Master's degree holder		
Age	Total registrants	Number	Percent of total	Percent
All ages	223,854	61,222	27	100
20 - 24	8,247	1,611	20	3
25 - 29	34, 102	12,484	37	20
30 - 34	39,896	12,324	31	20
35 - 39	40,148	10,769	27	18
40 - 44	35,831	8,924	25	15
45 - 49	24,726	5,704	23	9
50 - 54	16,921	4,059	24	7
55 - 59	11,308	2,704	24	4
60 - 64	6,966	1,507	22	2
65 - 69	3,428	715	21	Ī
70 and over	1,992	332	17	i
No report	289	89	31	<u>'</u>

#### SCIENTISTS WITH MASTER'S AS HIGHEST DEGREE

**Employment Status** • More than three-fourths (78 percent) of the scientists holding a master's degree were in full-time civilian employment.

	Master's degree nolder		
Employment status	Number	Percent	
All registrants	61,222	100	
Full-time employed	48,858	80	
Civilian	(47,642)	(78)	
Military	(1,216)	(2)	
Part-time employed	1,171	2	
Students	8,952	15	
Part-time employed	( 6,752)	(11)	
Not employed	( 2,200)	(4)	
Employed but not		• •	
professional work	761	1	
Not employed _a/	1,355	.2	
No report	125	•	

Type of Employer • About one-fourth of the scientists employed by each type of employer held the master's degree - except employees of other government (36 percent).

Among holders of the master's degree, almost identical percentages worked for educational institutions (36 percent) and for industry and business (35 percent).

		Master's degree holder		
Type of employer	Total registrants	Number	Percent of total	Percent
All registrants b	223,854	61,222	27	100
Educational institutions c	77,727	22,044	28	36
Federal Government	23,405	6,085	26	10
Other government _d/	7,472	2,637	36	4
Military	5,522	1,428	26	2
Nonprofit organizations	8,722	2,195	25	4
Industry and business	84,421	21,489	25	35
Self-employed	4,277	880	21	1
Other	1,434	458	32	1
No report	1,257	451	36	1

Includes retired persons, housewives, etc.

Source -- National Register of Scientific and Technical Personnel, 1964.



There were 3,555 master's degree holders not employed, including retired persons, housewives, students, etc., constituting 6 percent of all master's degree holders and 37 percent of all registrants not employed.

includes universities, colleges, and secondary school systems.

d/Includes State, local, regional, and international agencies.

# SCIENTISTS WITH MASTER'S AS HIGHEST DEGREE

Primary Work Activity Of master's degree holders, 28 per - cent worked primarily in basic or applied research, and 21 percent reported teaching as their primary work.

	Master's degree holder	
Primary work activity	Number	Percent
All activities a	61,222	100
Research and development Basic research Applied research Management or administration Management or administration of	20,380 (7,282) (9,768) 11,237	33 (12) (16) 18
research and development Teaching Production and inspection Other No report	( 5,788) 12,875 3,494 8,030 1,651	( 9) 21 6 13 3

Years of Professional Experience Of master's degree holders, 23 percent had less than 5 years of professional experience.

	Master's degi	ree holder
Years of professional experience	Number	Percent
All years	61,222	100
1 year 2 to 4 years 5 to 9 years 10 to 14 years 15 to 19 years 20 or more No report	2,258 11,328 13,751 11,670 6,522 11,846 3,847	4 19 22 19 11 19 6



There were 3,555 (6 percent of master's degree holders) not employed, including retired persons, housewives, etc.

# SCIENTISTS WITH BACHELOR'S AS HIGHEST DEGREE

Scientific Field •Bachelor's degrees were held by 46 percent of the scientists in agricultural sciences and meteorology, 45 percent of those in earth sciences, and 43 percent of those in chemistry.

		8achelor's degree holder		
Field	Total registrants	Number	Percent of total	Perc ent
All fields	223,854	72,364	32	100
Chemistry Earth sciences Meteurology Physics Marnematics Agricultural sciences Biological sciences Psychology Statistics Economics Sociology Linguistics Other fields	63,053 17,907 5,510 26,698 17,411 9,526 27,135 16,804 2,843 12,143 2,703 1,351 20,770	27,377 8,101 2,524 7,673 4,917 4,362 3,172 417 810 2,613 65 162 10,171	43 45 46 29 28 46 12 2 28 22 2 12 49	38 11 3 11 7 6 4 1 1 4 -

Age Of scientists holding the bachelor's degree, 30 percent were less than 30 years old.

		Bachelor's degree holder		older
Age	Fotal registrants	Number	Percent of total	Percent
All ages	223,854	72,364	32	100
20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 50 - 54 55 - 59 60 - 64 65 - 69 70 and over No report	8,247 34,102 39,896 40,148 35,831 24,726 16,921 11,308 6,966 3,428 1,992 289	6,491 15,356 11,858 11,193 10,089 7,226 4,665 2,729 1,521 701 434 101	79 45 30 28 28 29 28 24 22 20 22 35	9 21 16 15 14 10 6 4 2 1

# SCIENTISTS WITH BACHELOR'S AS HIGHEST DEGREE

**Employment Status** • Of scientists holding the bachelor's degree, 81 percent were in full-time civilian employment.

Employment status	Bachelor's degree holder		
	Number	Percent	
All registrants	72,364	100	
Full-time employed	59,838	83	
Civilian	(58,282)	( 81)	
Military	(1,556)	(2)	
Part-time employed	791	1	
<b>Students</b>	8,051	11	
Part-time employed	( 5, 963)	( 8)	
Not employed	( 2,088)	(3)	
imployed but not	, , ,	( 9	
professional work	1,695	2	
Not employed _9/	1,898	3	
No report	91	i	

Type of Employer • Almost one-half (48 percent) of the scientists employed by industry and business and 41 percent in Federal Government held the bachelor's degree.

Over half (56 percent) of holders of the bachelor's degree were employed by industry and business.

Type of employer	Total registrants	Bach elor's degree holder		
		Number	Percent of total	Percent
All registrants b/	223,854	72,364	32	100
Educational institutions E/	77,727	10,212	13	14
Federal Government	23,405	9,521	41	13
Other government _d/	7,472	2,484	33	3
Military	5,522	2,209	40	3
Nonprofit organizations	8,722	1,449	17	2
Industry and business	84,421	40,233	48	56
Self-employed	4,277	1,441	34	2
Other	1,434	366	26	1
No report	1,257	463	37	i

includes retired persons, housewives, etc.



30

b/There were 3,986 bachelor's degree holders not employed, including retired persons, housewives, students, etc., constituting 6 percent of all bachelor's degree holders and 41 percent of all registrants not employed.

Source -- National Register of Scientific and Technical Personnel, 1964.

\_c/ Includes universities, colleges, and secondary school systems.

d/Includes State, local, regional, and international agencies.

## SCIENTISTS WITH BACHELOR'S AS HIGHEST DEGREE

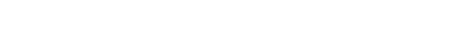
**Primary Work Activity** • Of the bachelor's degree holders, 24 percent worked primarily in management or administration, 16 percent in production and inspection, and 12 percent in applied research.

	Bachelor's degree holder		
Primary work activity	Number	Perc ent	
All activities 🛂	72,364	100	
Research and development	22,002	30	
Basic research	( 6, 434)	( 9)	
Applied research	(8,563)	(12)	
Management or administration	17,565	24	
Management or administration	•	-7	
of research and development	(7,002)	( 10)	
Teaching	4,604	6	
Production and inspection	11,731	16	
Other	10,315	14	
No report	2,161	3	

Years of Professional Experience • Almost one- fourth (23 percent) of the bachelor's degree holders had less than 5 years of professional experience.

	Bachelor's degree holder		
Years of professional experience	Number	Percent	
All years	72,364	100	
l year	3,737	5	
2 to 4 years	13,315	18	
5 to 9 years	14,200	20	
10 to 14 years	12,305	17	
15 to 19 years	8,099	11	
20 or more	15,481	21	
No report	5,227	7	

There were 3,986 (6 percent of bachelor's degree holders) not employed, including retired persons, housewives, etc.



Source -- National Register of Scientific and Technical Personne



## SCIENTISTS EMPLOYED IN EDUCATIONAL INSTITUTIONS 4

Scientific Field • Almost one-half (53 percent) of scientists employed in educational institutions were in the biological sciences, in chemistry, and in physics.

		Registrants in educational institutio		
Field	Total registrants	Number	Percent of total	Percent
All fields	223,854	77,727	35	100
Chemistry Earth sciences Meteorology Physics Mathematics Agricultural sciences Biological sciences Psychology Statistics Economics Sociology Linguistics Other fields	63,053 17,907 5,510 26,698 17,411 9,526 27,135 16,804 2,843 12,143 2,703 1,351 20,770	13,616 4,023 527 11,611 7,206 2,833 15,872 8,162 778 5,061 2,080 930 5,028	22 22 10 43 41 30 58 49 27 42 77 69 24	18 5 1 15 9 4 20 11 1 7 3 1

Age About one-fourth (22 percent) of the scientists employed in educational institutions were less than 30 years old.

	Registrants in educa	Registrants in educational institutions		
Age	Number	Percent		
All ages	77,727	100		
20 <b>-</b> 24 25 <b>-</b> 29	3,844 13,043	5 17		
30 - 34 35 - 39 40 - 44	14, 159 13, 017	18 17		
45 - 49 50 - 54	11,229 7,796 5,626	14 10		
55 <b>-</b> 59 60 <b>-</b> 64	4,236 2,917	, 5 4		
65 - 69 70 and over	1,367 369	2		
No report	124	-		

<sup>&#</sup>x27;a/ Includes universities, colleges, and secondary school systems.

Source -- National Register of Scientific and Technicol Personnel, 1964
32



### SCIENTISTS EMPLOYED IN EDUCATIONAL INSTITUTIONS =

Primary Work Activity • One-half (51 percent) of the scientists in educational institutions were primarily engaged in teaching; 26 percent were primarily in basic research.

	Stegistrants in educa	tional institutions
Primary work activity	Number	Percent
All activities	77,727	100
Research and development	26,392	34
Basic research	(19,894)	( 26)
Applied research	(6,047)	(8)
Management or administration Management or administration	5,778	7
of research and development	(2,793)	(4)
Teaching	39,926	51
Production and inspection	249	•
Other	3,325	4
No report	2,057	3

Years of Professional Experience • Of scientists employed in educational institutions, 23 percent had less than 5 years of professional experience.

	Registrants in educational institutions		
Years of professional experience	Number	Percent	
All years	77,727	100	
lyear	3,484	4	
2 to 4 years	15, 154	19	
5 to 9 years	16, 324	21	
10 to 14 years	13,030	17	
15 to 19 years	8,075	10	
20 or more years	16,833	22	
No report	4,827	6	



and Includes universities, colleges, and secondary school systems.

# HIGHEST DEGREE AND ACADEMIC RANK OF UNIVERSITY AND COLLEGE TEACHERS

Two-thirds of the university and college teachers held doctorates.

		Registrants with:			
Academic rank	Total registrants	Ph.D. degree	Professional medical degree	Master's degree	Bachelor's degree
All ranks	49,595	32,776	2,039	11,035	3,572
Dean	145	118	1	26	_
Professor Associate	13,086	11,492	664	752	124
professor Assistant	10,381	8,433	484	1,336	98
pro fessor	11,343	8,078	410	2,599	222
Instructor	4, 183	882	123	2,657	508
Lecturer Research	709	401	4	256	45
associate Research	235	145	49	28	11
assistant	3,367	123	37	1,664	1,534
Other	1,337	224	10	474	624
No report	4,809	2,880	257	1,243	406

Note: These data are based an scientists reporting teaching as a primary or secondary work activity.

Source -- National Register of Scientific and Technical Personnel, 1964.



### SCIENTISTS EMPLOYED IN INDUSTRY AND BUSINESS

Scientific Field • Almost one-half (45 percent) of the scientists employed in industry and business were in chemistry.

		Registrants in industry and busine		
Field	Total registrants	Number	Percent of total	Percent
All fields	223,854	84,421	38	100
Chemistry Earth sciences Meteorology Physics Mathematics Agricultural sciences Biological sciences Psychology Statistics Economics Sociology Linguistics Other fields	63,053 17,907 5,510 26,698 17,411 9,526 27,135 16,804 2,843 12,143 2,703 1,351 20,770	37,859 8,400 594 8,954 6,935 1,382 2,720 1,362 1,055 3,967 55 64	60 47 11 34 40 15 10 8 37 33 2 5	45 10 1 11 8 2 3 2 1 5

Age of scientists employed in industry and business, 16 percent were less than 30 years old.

	Registrants in ind	Registrants in industry and business		
Age	Number	Percent		
All ages	84, 421	100		
20 - 24	1,781	2		
25 - 29	11,495	14		
30 - 34	15,845	19		
35 - 39	17,109	20		
40 - 44	15, 137	18		
45 - 49	10, 152	12		
50 - 54	6,503	8		
55 - 59	3,670	4		
60 - 64	1,988	2		
65 - 69	466	1		
70 and over	205	_		
No report	70	-		

### SCIENTISTS EMPLOYED IN INDUSTRY AND BUSINESS

Primary Work Activity •One-half (49 percent) of the scientists in industry and business were primarily engaged in applied research (19 percent) or in management or administration, including management or administration of research and development (30 percent).

	Registrants in industry and business		
Primary work activity	Number	Percent	
All activities	84,421	100	
Research and development	32,741	39	
Basic research	(6,863)	(8)	
Applied research	(15, 924)	( 19)	
Management or administration  Management or administration	25,563	30	
of research and development	(14,722)	(17)	
Teaching	170	` <del>-</del> '	
Production and inspection	13,693	16	
Other	10,602	13	
No report	1,652	2	

Years of Professional Experience •Of scientists employed in industry and business, 15 percent had less than 5 years of professional experience.

	Registrants in industry and business		
Years of professional experience	Number	Percent	
All years	84, 421	100	
l year	2,325	3	
2 to 4 years	10,302	12	
to 9 years	17,752	21	
0 to 14 years	18,758	22	
15 to 19 years	11, 125	13	
20 or more years	21,160	25	
No report	2,999	4	

### SCIENTISTS EMPLOYED IN THE FEDERAL GOVERNMENT

Scientific Field •Almost one-third (31 percent) of the scientists employed in the Federal Government were in chemistry and agricultural fields.

	`	Registrants in the Federal Governme		
Field	Total registrants	Number	Percent of total	Percent
All fields	223,854	23, 405	10	100
Chemistry	63,053	4,004	6	17
Earth sciences	17,907	2,325	13	10
Meteorology	5,510	1,857	34	8
Physics	26,698	2,913	11	12
Mathematics	17,411	1,113	6	5
Agricultural sciences	9,526	3,295	35	14
Biological sciences	27,135	2,916	11	12
Psychology	16,804	1,378	8	6
Statistics	2,843	568	20	2
Economics	12,143	1,274	10	5
Sociology	2,703	137	5	1
Linguistics	1,351	72	5	-
Other fields	20,770	1,553	7	7

Age Twelve percent of the scientists employed in the Federal Government were less than 30 years old.

•	Registrants in the Federal Government	
Age	Number	Percent
All ages	23,405	100
20 - 24	324	1
25 - 29	2,670	11
30 - 34	3,848	16
35 - 39	4,051	17
40 - 44	4,020	17
45 - 49	3,255	14
50 - 54	2,381	10
55 - 59	1,691	7
60 - 64	763	3
65 - 69	311	1
70 and over	51	-
No report	40	-

Saurce -- National Register of Scientific and Technical Personnel, 1964.



### SCIENTISTS EMPLOYED IN THE FEDERAL GOVERNMENT

Primary Work Activity •Of scientists in the Federal Government, 40 percent were engaged in basic or applied research;32 percent were in management or administration, including management or administration of research and development.

	Registrants in the Federal Government		
Primary work activity	Number	Percent	
All octivities	23,405	100	
Research and development	10,242	44	
Basic research	(5,002)	(21)	
Applied research	(4,535)	(19)	
Management or administration	7,442	32	
Management or administration	·		
of research and development	(3,846)	(16)	
Teaching	203	1	
Production and inspection	1,274	5	
Other	3,654	16	
No report	590	3	

Years of Professional Experience Of scientists employed in the Federal Government, 15 percent had less than 5 years of professional experience.

	Registrants in the Federal Government	
Years of professional experience	Number	Percent
All years	23,405	100
1 year	485	2
2 to 4 years	3,147	13
5 to 9 years	4,617	20
10 to 14 years	4,698	20
15 to 19 years	2,995	13
20 or more years	6,786	29
No report	677	3

## SCIENTISTS EMPLOYED IN NONPROFIT ORGANIZATIONS

**Scientific Field** • Scientists employed in nonprofit organizations were concentrated in biological sciences, chemistry, and psychology.

		Registrants	in nonprofit on	ganizations
Field	Total registrants	Number	Percent of total	Percent
All fields	223,854	8,722	4	100
Chemistry Earth sciences Meteorology Physics Mathematics Agricultural sciences Biological sciences Psychology Statistics Economics Sociology Linguistics Other fields	63,053 17,907 5,510 26,698 17,411 9,526 27,135 16,804 2,843 12,143 2,703 1,351 20,770	1,679 216 152 1,011 828 c9 1,775 1,574 139 465 160 100 524	3 1 3 4 5 1 7 9 5 4 6 7 3	19 2 2 12 9 1 20 18 2 5 2

Age •Of the scientists employed by nonprofit organizations, 12 percent were less than 30 years old.

	Registrants in non	Registrants in nonprofit organizations	
Age	Number	Percent	
All ages	8,722	100	
20 - 24	111	1	
25 <b>-</b> 29	972	11	
20 <i>-</i> 24 30 <i>-</i> 34	1,654	19	
35 <b>-</b> 39.	1,875	21	
10 <b>-</b> 44	1,609	18	
	972	11	
45 <b>-</b> 49	659	8	
50 - 54	430	5	
55 - 59	259	3	
60 - 64	101	1	
5 - 69	73	i	
70 and over	/3	_	
No report	/	·	



### SCIENTISTS EMPLOYED IN NONPROFIT **ORGANIZATIONS**

Primary Work Activity One-half of the scientists in non profit organizations were engaged in research and development; 24 percent were in management or administration, including management or administration of research and development.

	Registrants in nonprofit organizations		
Primary work activity	Number	Percent	
All activities	8,722	100 🐔	
Research and development Basic research Applied research Management or administration Management or administration of research and development Teaching Production and inspection Other	4,344 (2,334) (1,739) 2,086 (1,257) 154 245	50 (27) (20) 24 (14) 2 3	
No report	1,689	19 2	

Years of Professional Experience Of scientists employed in nonprofit organizations, 16 percent had less than 5 years of professional experience.

	Registrants in nonprofit organizations	
Years of professional experience	Number	Percent
All years	8,722	100
1 year 2 to 4 years 5 to 9 years 10 to 14 years 15 to 19 years 20 or more years No report	244 1, 163 1, 958 1, 962 1, 131 1, 919 345	3 13 22 22 21 13 22 4

### SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS

Highest Degree ◆Highest median annual salaries were reported by the field of meteorology (\$13,800) and physics (\$13,500) for Ph. D. 's; by meteorology (\$11,700) and statistics (\$11,500) for master's degree holders; and by economics (\$13,500) and sociology (\$12,000) for bach elor's degree holders.

	Media . annual salary of full-time employed civilian scientists		
Field	Ph.D.	Master's as	Bachelor's as
	degree	highest degree	highest degree
All fields	\$12,000	\$10,000	\$10,000
Chemistry Earth sciences Meteorology Physics Mathematics Agricultural sciences Biological sciences Psychology Statistics Economics Sociology Linguistics Other fields	13,000	10,600	9,900
	11,000	9,700	10,600
	13,800	11,700	10,300
	13,500	10,500	10,000
	12,000	10,200	11,500
	11,300	8,800	8,400
	11,200	8,000	7,700
	11,000	8,900	9,900
	13,000	11,500	11,500
	12,100	11,000	13,500
	10,400	8,900	12,000
	10,000	7,100	6,300
	13,500	10,300	10,600

Age Median salaries increased for each age group up to ages 55 - 59, decreasing for higher age groups.

Age	Median annual salary of full-time employed civilian scientists
All ages	\$11,000
20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 50 - 54 55 - 59 60 - 64 65 - 69 70 and over	7,000 8,000 9,500 11,000 12,100 13,000 13,300 13,400 13,300 12,500 12,000

Note: Salaries reported by highest degree should be further evaluated in terms of employer, years of experience, etc.

Source -- National Register of Scientific and Technical Personnel, 1964.



## SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS

Type of Employer • Median salary was highest among self-employed scientists -- \$15,000.

Type of employer	Median annual salary af full-time employed civilian scientists
All emplayers	· \$11,000
Educational institutions of reduced Government Other government Nonprofit arganizations Industry and positions Self-emplayed Other	9,600 11,000 9,000 12,000 12,000 15,000 11,000

Primary Work Activity Highest median salary was for scientists managing or administering research and development -- \$15,500.

Primary wark activity	Median annual salary af full-time emplayed civilian scientists
All activities	\$11,000
Research and development Basic research Applied research Management ar administration Management ar administration	11,000 (11,000) (11,000) 14,500
af research and development Teaching _c/ Praduction and inspection Other	(15,500) 8,700 9,800 10,500

Includes universities, calleges, and secondary school systems. Salaries do not account far number of months emplayed.

Note: See Table A-16 far academic and calendar year salaries.

Source -- National Register of Scientific and Technical Persannel, 1964.



b/ Includes State, local, regional, and international agencies.

C/ Reflects a camposite of high school and callege academic and calendar year salaries.

### SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS

Years of Professional Experience • Median salaries of scientists increased in relation to length of professional experience.

Years of professional experience	Median annual salary of full-time employed civilian scientists
all years	\$11,000
1 year	7,400
2 to 4 years	8,000
5 to 9 years	9,600
10 to 14 years	11,500
15 to 19 years	12,500
20 ar more	14,000

Source -- National Register of Scientific and Technical Personnel, 1964.



#### GEOGRAPHIC LOCATION OF SCIENTISTS

**Selected States** •In each of eleven geographic locations there were more than 7,000 registrants. Scientists in the District of Columbia reported the highest median salary (\$13,000).

C-eographic locations	Total registrants	Median annual salary of full-time employed civilian scientists
All locations	223,854	\$11,000
Selected States	139,437	-
California New York Pennsylvania New Jersey Illinois Texas Ohio Massachusetts Michigan District of Columbia Maryland	26,645 24,510 12,813 11,844 11,537 10,660 10,135 9,540 7,573 7,175 7,005	12,000 11,800 11,000 12,000 10,800 10,300 10,600 11,000 10,800 13,000

### Selected Standard Metropolitan Statistical Areas

●In each of seventeen metropolitan areas there were over 2,000 registrants. The Wilmington, Del. area reported the highest median salary (\$13,500).

Standard Metropolitan Statistical Areas	Total registrants	Median annual salary of full-time employed civilian scientists
All locations	223,854	\$11,000
Selected metropolitan areas	91,388	-
Washington, D.C. – Md. – Va. Los Angeles – Long Beach, Calif. Chicago, Ill. Boston, Mass. San Francisco – Oakland, Calif. Philadelphia, Pa. – N.J. Newark, N.J. Pittsburgh, Pa. Minneapolis – St. Paul, Minn. San Jose, Calif. Houston, Tex. Denver, Colo. Wilmington, Del. – N.J. – Md. Cleveland, Ohio Detroit, Mich. St. Louis, Mo. – Ill.	14,870 11,788 9,390 7,615 7,230 6,342 6,197 4,462 2,932 2,898 2,761 2,642 2,609 2,594 2,550 2,256 2,252	12,000 12,600 12,500 11,200 11,500 12,000 11,300 12,100 11,900 11,000 12,600 12,000 11,000 13,500 11,000 10,900 11,200

Source -- National Register of Scientific and Technical Personnel, 1964



## SCIENTISTS WITH FOREIGN LANGUAGE KNOWLEDGE

Scientific Field • Foreign language knowledge of scientists ranged from 56 to 98 percent, depending on the field of specialization.

		Registrants re	Registrants reporting a foreign language		
Field	Total registrants	Number	Percent of total	Percent	
All fields	223, 854	180,925	81	100	
Chemistry Earth sciences Meteorology Physics Mathematics Agricultural sciences Biological sciences Psychology Statistics Economics Sociology Linguistics Other fields	63,053 17,907 5,510 26,698 17,411 9,526 27,135 16,804 2,843 12,143 2,703 1,351 20,770	52,913 14,073 3,777 23,663 14,226 5,356 23,644 13,692 2,165 9,372 2,450 1,325 14,269	84 79 69 89 82 56 87 81 76 77 91 98	29 8 2 13 8 3 13 8 1 5 1	

Foreign Language Proficiency • Of scientists reporting some proficiency in foreign languages, over 100,000 individuals were able to translate foreign technical journals into English.

Level of proficiency	Number	
Can prepare and deliver lectures		•
Fluently	20,866	
Superficially	28,860	
Can converse		
Fluently	25, 414	
Passably	68,612	
Have facility to translate technical journals	5 <b>, 5</b> _	
Into English	108,391	
From English	28,561	
Can read technical articles for own use	20,301	
Easily	104,211	
With difficulty	115,050	
Some knowledge but can't use as medium		
of communication	78,862	
No report of proficiency	142,672	

NOTE: These data are based on a maximum of two foreign languages reported by 179,543 of the 223, 854 total registrants.

### SCIENTISTS WITH FOREIGN AREA KNOWLEDGE

**Scientific Field** •Knowledge of foreign areas was reported by 69 percent of those in linguistics, and about 40 percent of those in sociology and meteorology.

		Registrants with foreign area knowledge		
l i i i i i i i i i i i i i i i i i i i	Total registrants	Number	Percent of total	
All fields	223, 854	47,495	21	
Chamistry	50,000	2, 438	16	
Earth sciences	17,907	4,861	27	
Meteorology	5,510	2,248	41	
Physics	26,698	<i>4,7</i> 21	18	
Mathematics	17,411	3,285	19	
Agricultural sciences	9,526	1,536	16	
Biological sciences	27,135	7,332	27	
Psychology	16,804	3,084	18	
Statistics	2,843	607	21	
Economics	12,143	3,990	33	
Sociology	2,703	1,126	42	
Linguistics	1,351	934	69	
Other fields	20,770	3,833	18	

Source -- National Register of Scientific and Technical Personnel, 1964.



#### SCIENTISTS RECEIVING FEDERAL SUPPORT

Scientific Field • Most of the scientists in meteorology (87 per cent) and agricultural sciences (67 percent) received Federal support.

Total		Registrants receiving Federal support		
registrants	Number	Percent of total		
223,854	97,004	43		
63,053 17,907 5,510 26,698 17,411 9,526 27,135 16,804 2,843 12,143 2,703	19,305 4,808 4,814 14,719 7,818 6,406 16,123 6,397 1,484 3,589 985 403	31 27 87 63 45 67 59 38 52 30 36 30		
	223,854  63,053 17,907 5,510 26,698 17,411 9,526 27,135 16,804 2,843 12,143	223,854 97,004  63,053 19,305 17,907 4,808 5,510 4,814 26,698 14,718 17,411 7,818 9,526 6,406 27,135 16,123 16,804 6,397 2,843 1,484 12,143 3,589 2,703 985 1,351 403		

**Highest Degree** • Almost one-third (31 percent) of the Ph. D.'s receiving Federal support were in health programs; 35 percent of the master's degree holders and 39 percent of the bachelor's degree holders were supported by Federal defense programs.

	R	Registrants receiving Federal support				
Government program	Total	Ph.D. degree	Master's as highest degree	Bachelor's as highest degree		
All programs	97,004 - 1	39,613	23,752	27,116		
Agriculture Atomic energy Defense Education Health International Natural resources Public works Space Other	10,957 11,267 29,399 8,679 20,736 1,835 6,822 1,298 13,625	5,501 5,093 8,954 4,400 12,204 890 1,610 231 4,309 5,538	2,618 2,694 8,360 2,611 2,470 439 1,859 320 3,914 3,164	2,610 3,239 10,600 1,353 2,298 401 3,216 683 4,984 3,642		

Of this number, 20,758 reported support from more than one Federal program, hence the number of scientists by program do not add to the total.



### SCIENTISTS RECEIVING FEDERAL SUPPORT

Type of Employer •More than one-third (39 percent) of all scientists receiving Federal support were employed by educational institutions and 20 percent were employed by industry and business.

		Registrants receivi	ng Federal support
Type of employer	Total registrants	Number	Percent
All registrants a/	223, 854	97,004	100
Educational institutions by Federol Government Other government c/ Militory Nonprofit organizations Industry and business Self-employed Other No report	77,727 23,405 7,472 5,522 8,722 84,421 4,277 1,434 1,257	37, 915 23, 405 3, 646 5, 522 5, 314 19, 771 620 593 218	39 24 4 6 5 20 1

Note: Scientists employed by Federal Government and Military receive their salaries directly from the U.S. Treasury. Scientists employed by other types of employers are supported or sponsored in whole or in part by Federal funds through contracts or grants.



There were 9,617 registrants not employed, including retired persons, housewives, etc.

Includes State, local, regional, and international agencies.

b/ Includes universities, colleges, and secondary school systems.

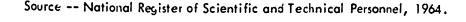
### WOMEN SCIENTISTS

**Scientific Field** • Of all scientists in psychology, 22 percent were women. Almost one-half (47 percent) of the women were concentrated in the fields of chemistry and psychology.

		Women		
Field	Total registrants	Number	Percent of total	Percent
All fields	223,854	17,104	8	100
Chemistry Earth sciences	63,053 17,907	4,204	7	25
Meteorology	5,510	517 86	3 2	3
Physics	26,698	856	3	5
Mathematics	17,411	1,747	10	10
Agricultural sciences	9,526	51	1	-
Biological sciences	27,135	3,107	11	. 18
Psychology	16,804	3,747	22	22
Statistics	2,843	289	10	2 3
Economics	12,143	493	4	3
Sociology	2,703	407	15	2
Linguistics	1,351	261	19	2 2 8
Other fields	20,770	1,339	6	8

Highest Degree •More than one-third (34 percent) of all women Ph.D. degree holders were in psychology and 23 percent were in biological sciences. Twenty-eight percent of women holding the master's degree were in psychology and 16 percent were in chemistry. Almost one-half (45 percent) of all women holding the bachelor's degree were in chemistry.

		Women				
Field	Total	Ph.D. degree	Master's as highest degree	Bachelor's as highest degree		
All fields	17,104	5,458	6,526	4,661		
Chemistry Earth sciences Meteorology Physics Mathematics Agricultural sciences Piological sciences Psychology Statistics Economics Sociology Linguistics Other fields	4,204 517 86 856 1,747 51 3,107 3,747 289 493 407 261 1,339	976 99 11 212 266 7 1,235 1,836 55 195 272 194 190	1,041 202 28 334 954 12 971 1,803 126 228 116 115 596	2,111 206 37 299 492 28 650 94 93 61 14 33 543		





#### WOMEN SCIENTISTS

Type of Employer •One-half of the women scientists were employed by educational institutions.

	Wo	men
Type of employer	Number	Percent
All registrants a/	17,104	100
Educational institutions b	8,378	49
Federal Government	1,347	8
Other government <u>c</u> /	858	5
Military	50	-
Nonprofit organizations	1,110	6
Industry and business	2,241	13
Self-employed	469	3
Other	209	1
No report	134	1

Primary Work Activity Research and development and teaching were the primary work activities reported by women.

	Wor	men
Primary work activity	Number	Percent
All activities a/	17, 104	100
Research and development	5,279	31
Basic research	(2,862)	(17)
Applied research	(2,130)	(12)
Management or administration	1,065	6
Management or administration	·	
of research and development	( 483 )	( 3)
Teaching	4,897	29
Production and inspection	612	4
Other	2,416	14
No report	527	3

Source -- National Register of Scientific and Technical Personnel, 1964. 50

There were 2,308 (13 percent) of women scientists not employed, including retired persons, housewives, etc.

b/ Includes universities, colleges, and secondary school systems.

Includes State, local, regional, and international agencies.

#### **WOMEN SCIENTISTS**

Years of Professional Experience • About one-fourth of women scientists had less than 5 years of professional experience.

	Women						
Years of professional experience	Number	Percent					
All years	17,104	100					
One year	785	5					
2 to 4 years	3,213	19					
5 to 9 years	3,439	20					
10 to 14 years	2,456	14					
15 to 19 years	1,866	11					
20 or more	4, 153	24					
No report	1,192	7					

### Salaries of Full-Time Employed Women Scientists

● The highest median annual salaries of women scientists were in the fields of statistics and economics (\$10,000).

Field	Median annual salary of full-time employed
All Sields	\$8,400
Chemistry Earth sciences Meteorology Physics Mathematics Agricuitural sciences Biological sciences Psychology Statistics Economics Sociology Linguistics Other fields	7,700 8,200 8,200 8,600 8,500 7,200 8,400 9,000 10,000 10,000 9,000 7,500 7,500

### PART III Selected Tables



#### List of Selected Tables

1. General characteristics of U.S. scientists in the National Register of Scientific and Technical Personnel, 1964
ambot of scientists, DV field and employment of the 1004
4. Number of scientists, by age and highest degree, 1964  5. Number of scientists, by employment status and highest degree, 1964
The state of the s
on the contract of the contrac
15. Median annual salaries of full-time employed civilian scientists, by field and age, 1964.
distributed of full-time employed civilian agientists by fold and town of
17. Median annual salaries of full-time employed civilian scientists, by field and work activity,
18. Median annual salaries of full-time employed civilian scientists, by field and years of pro-
said and said to of full-time employed divilion egiphicits has high and the
V. V. PIV. VII IVVII
20. Median annual salaries of full-time employed civilian scientists, by great activities 1
21. Median annual salaries of full-time employed civilian scientists, by years of professional experience and type of employer 1964
1
-2" " " " Stientists, by selected States and field 10g/
To The solution by selected States and highest degree 4004
The state of the s
A MANATAMAN DA SCIENTISTI G'ALDE ONO MICHIE AND A
The state of the s
by scienced Standard Welfonolitan Statistical Argas and highest designs and highest designs are sent as the second second bight and the second
O-44) At 4 A-4 A-4 A-4 A-4 A-4 A-4 A-4 A-4 A-4 A
29. Number of scient sts, by selected Standard Metropolitan Statistical Areas and type of employer, 1964
of rumber of Scientists, by selected Standard Metropolitan Statistical Among the
or remote and median annual salaries of full-time employed civilian activities
The second control of
and the solution of solutions with a knowledge of colored foreign languages.
The state of the s
THE TERMINAL PROPERTY OF THE P
48. Number of scientists, by field and field of employment, 1964

TABLE 1.-GENERAL CHARACTERISICS OF U.S. SCIENTISTS IN THE NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964

CHARACTERISTICS	NUMBER	PERCENT	CHARACTERISTICS	NUMBER	PERCENT
REGISTERED SCIENTISTS					PERCEN
MEN		106	TYPE OF EMPLOYER	1	
NORN NAKOW	205,750	92	FDUCATIONAL INCRETAGE	1	1
FIELD OF SCIENCE	17,104	8	EDUCATIONAL INSTITUTIONS	77.727	35
CHEMICION CONTRACTOR		!	FEDERAL GOVERNMENT	23,405	10
CHEMISTRY	63.053	28	OTHER GOVERNMENT	7,472	
EARTH SCIENCES			MILITARY	5,522	3
METEOROLOGY	1 2.707	8	NONPROFIT ORGANIZATIONS	1 -	2
PHYSICS	27320	2	II INDUSTRY AND BUSINESS	8,722	4
MATHEMATICS	1 20,070	12		0.17.72.1	38
AGRICULTURAL SCIENCES	1	9	II OTHER	4,277	2
BIOLOGICAL SCIENCES		4	NOT EMPLOYED =	1 27727	1
PSYCHOLOGY	14-33	12	NO REFURT	9,617	4
STATISTICS -	16,804		WURK ACTIVETY	1,257	1
STATISTICS	7 2,843	lil	RESEARCH AND DENSE COMMITTEE	l i	-
ECONOMIC2	12,143	i 5 !	RESEARCH AND DEVELOPMENT	77,699	35
SOCIOLOGY		líi	BASIC RESEARCH	35.781	16
LINGUISTICS			APPLIED RESEARCH	30,280	
OTHER FIELDS	14327	1 1	HANAGEMENT OR ADMINISTRATION = = = = = =		1.4
HIGHEST DEGREE	20,110	9	MANAGEMENT OR ADMINISTRATION	46,255	21
PROFESSIONAL MEDICAL	1	35	TEACHING		11
HASTER'S	5,925	3	PRODUCTION AND INSPECTION	41,209	18
BACHELOR'S	61,222	27	OTHER	16,582	7
TECC THAN ARMEDIA	72.364	32	NOT FURNISHED	26,301	12
LESS THAN BACHELOR'S	2,878	ĩ	NOT EMPLOYED	9,617	- 4
NO REPORT	2: 093	i	NO REPORT	6,191	3
MGE (MEDIAN AGE 38)		· [	YEARS OF PROFESSIONAL EXPERIENCE		-
25-29	1 07271	4 ]]	/=0 = = = = = =	0,302	4
30-34	1 344 102	15			16
35-39	1 2.10,01	18	10-14	45,249	20
46-44	1 400 740 1	18 ji	15-19	1-1100	19
45-49	- 35,831 i	16	20 OR MORE	26,304	12
50-54	24,726	11	NO REPORT	53,778	24
50-54	16,921	8	" REPORT	12,650	-6
		š			·
60-64	6,966	3		1	
65-69	3,428				
10 UK UVEK	1 1	2			
NO REPORT	1 74 226 1	· 1 !!	1964 SALARY		
MPLNYMENT STATUS	207				
FILL-TIME EMPLOYED	1 1	il.			
CIVILIAN	193,943	87	SALARY DISTRIBUTION OF FULL-TIME	!	
MILITARY	189,350	85	EMPLOYED CIVILIAN SCIENTISTS	ł	
		2	CHARGIED CLAIFTIM SCIENTIALS	- 1	
		2	LOWER DECILE	7.1	nn
STUDENTS	1 10 000	8	LOHER QUARTILE		00
PART-TIME EMPLOYED	1 13 307	- !!	MEDIAN	] ;;;	00
NO1 EMPLOYED	1 237333	6	UPPER QUARTILE	] ;;;;	00 00
EMPLOYED BUT NOT PROFESSIONAL PORY	77072	2	UPPER DECILE	- 7 14,0	00
NOT EMPLOYED	_, _,,	1		4 18*0	00
NO REPORT	1 48217 1	2		1	
	404 î	!]			

NOTE - PERCENTS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 2.-NUMBER OF SCIENTISTS, BY FIELD AND EMPLOYMENT STATUS, 1964

		EMPLOYMENT STATUS									
SCIENTIFIC AND TECHNICAL FIELD	TOTAL	FULL-TIME EMPLOYED			PART-	STUDENTS			EMPLOYED BUT NOT		REPORT OF
	TOTAL	CIVILIAN	HÎLITARY	IIKE EMPLOYED	TOTAL	PART- TIME EMPLOYED	NOT EMPLOYED	S I ONAL WORK		MENT	
ALL FIELDS	223,654	193,943	189;350	4,593	3,560	18,039	13,397	4,642	2,933	4,975	404
CHEMISTRY	63,053 17,907 5,51C 26,698 17,411 9,526 27,135 16,804 2,843 12,143 2,703 1,351 20,770	54,218 14,987 5,015 21,43 15,755 24,119 14,751 2,581 10,546 2,469 1,086 18,455	14,866 2,962 21,05; 15,293 8,74; 23,357 14,557 2,556 10,502 2,459 1,085	121 2,053 374 237 13 762 194 25 44	631 368 32 220 207 92 512 807 41 223 101 38 288	5,539 1,691 217 4,504 1,231 4,7916 =80 144 539 51 162 1,040	1+21x 168 3,501	1,351 480 49 1,003 285 78 475 163 30 175 16 84	768 357 151 174 125 135 146 131 35 450 15	1,817 482 91 347 277 82 364 495 36 335 81 42 526	30 22 4 24 41 15 80 40 6 50 5

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

TABLE 3.-NUMBER OF SCIENTISTS, BY FIELD AND HIGHEST DEGREE, 1964

			HIGHEST	LESS THAN	NO REPORT		
SCIENTIFIC AND TECHNICAL FIELD	TOTAL	PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHEL OR'S	BACKELOR*S DEGREE	
ALL FIELDS	223.854	79,372	5,925	61,22?	72,364	2,878	2,093
HEMISTRY	63+053	21:789	368	12,229	27,377	590	700
ARTH SCIENCES	17,907	3,578	1	5,829	8,101	254	244
TEOROLOGY	5,510	479		1,137	2,524	1,147	22.3
HYSICS	26,698	10,286	30	8,352	7,673	185	172
ATHEMATICS	17,411	4,603	5	7,464	4,917	210	212
RICULTURAL SCIENCES	9,526	2:36?	] 11	2,676	4,362	63	47
OLDGICAL SCIENCES	27,135	13,355	5,408	5.028	3,172	71	101
YCHOLUGY	16,804	10,843	52	5,464	417	4	24
ATISTICS	2,843	804	3	1,133	810	43	50
ONOMICS	12,143	5,091	2	4,204	2,613	70	143
CIOLOGY	2,703	2,179	9	434	65	] 3	13
VGUISTICS	1,351	723	2	407	162	} 1	50
HER FIELDS	20,770	3,269	34	6,865	10,171	217	214

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 4.-NUMBER OF SCIENTISTS, BY AGE AND HIGHEST DEGREE, 1964

	! !	i L	HIGHEST		LESS THAN	NO REPORT	
AGE	TOTAL	PH•9•	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S	BACHELOR'S DEGREE	OF DEGREE
ALL AGES	223,854	79,372	5,925	61,222	72,364	2,878	2,093
20-24	8,247 34,102 39,896 40,148 35,831 24,726 16,921	47 5,704 14,142 16,167 14,796 10,220 6,942	2 283 976 1,238 1,182 807 592	1,611 12,484 12,324 10,769 8,924 5,704 4,059	6,491 15,356 11,858 11,193 10,089 7,226 4,665	52 145 340 461 510 473 392	44 130 256 320 330 296 271
60-64	11,308 6,966 3,428 1,992 289	4.998 3.392 1.759 1.111 94	401 273 124 45 2	2,704 1,507 715 332 89	2,729 1,521 701 434 101	273 130 70 31	203 143 59 39 2

SOURCE - NATIONAL REG"STER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

EMOLOWACHT STATUS	ļ		HIGHEST		LESS THAN	NO REPORT	
EMPLOYMENT STATUS	TOTAL	PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S	BACHELOR'S DEGREE	OF DEGREE
ALL REGISTRANTS	223: 854	79,372	5,925	61,222	72,364	2,878	2,093
FULL-TIME EMPLOYED  MILITARY	193,943 189,350 4,593 3,560 18,039 13,397 4,642 2,933 4,975	75,275 74,674 601 1,352 763 513 250 334 1,531	5,562 5,094 468 172 136 95 41 10 20 25	48,858 47,642 1,216 1,171 8,952 6,752 2,200 761 1,355 125	59,838 58,282 1,556 791 8,051 5,963 2,088 1,695 1,898	2,591 1-955 636 34 53 22 31 93 97	1,819 1,703 116 40 84 52 32 40 74 36

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 6.-NUMBER OF SCIENTISTS, BY TYPE OF EMPLOYER AND HIGHEST DEGREE, 1964

			HIGHEST	LESS THAN	NO REPORT		
TYPE OF EMPLOYER	TOTAL	PH.O.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S	BACHELOR'S	OF DEGREE
ALL EMPLOYERS	223,854	79,372	5,925	61,222	72,364	2+878	2,093
DUCATIONAL INSTITUTIONS	77.727 23.405 7.472 5.522 8.722 84.421 4.277 1.434 9.617	42,112 6,717 1,969 649 4,056 19,979 1,344 516 1,781 249	2,986 371 240 472 874 347 478 56 61	22,044 5,085 2,637 1,428 2,195 21,489 880 458 3,555 451	20, 212 9, 521 2, 484 2, 209 1, 449 40, 233 1, 441 366 3, 906 463	85 510 75 645 75 1,250 79 14 128	288 201 59 119 73 1,123 55 24 106 43

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONMEL. 1964.

TABLE 7.-NUMBER OF SCIENTISTS, BY WORK ACTIVITY AND HIGHEST DEGREE. 1964

			HIGHEST	LESS THAN	NO REPORT		
HORK ACTIVITY	TOTAL	PK.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S	BACHELOR'S	OF DEGREE
ALL ACTIVITIES	223,854	79,372	5,925	61,222	72,364	2,878	2,093
RESEARCH AND DEVELOPMENT (A)	77,699 35,781 30,280 46,255	31,674 20,343 10,362 15,244	2,609 1,426 1,174 885	20,380 7,282 9,768 11,237	22,002 6,434 8,563 17,565	488 112 206 771	546 184 207 553
OF RESEARCH AND DEVELOPMENT	24,565 41,209 16,582 26,301 9,617 6,191	10,732 22,673 723 5,430 1,781 1,847	552 888 14 1,173 61 295	5,788 12,875 3,494 8,030 3,535 1,651	7,002 4,604 11,731 10,315 3,986 2,161	242 27 332 1,012 128 120	252 142 288 341 106 117

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(8)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SCURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 196%.



#### TABLE 8.-NUMBER OF SCIENTISTS, BY YEARS OF PROFESSIONAL EXPERIENCE AND HIGHEST DEGREE, 1964

			HIGHEST O	LESS THAN	NO REPORT		
YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	PH•Oc	PROFESSIONAL MEDICAL	MASTER'S	8ACHELOR*S	BACHELOR: S DEGREE	OF DEGREE
ALL YEARS	223,854	79,372	5,925	61,222	72,364	2,878	2,093
1 YEAR	8,303 34,864 45,249 42,706 26,304 53,778 12,650	2.191 9.447 15,610 16,769 9,837 22,446 3,072	97 563 1,054 1,110 913 1,905 283	2,258 11,328 13,751 11,670 6,522 11,846 3,847	3,737 13,315 14,200 12,305 8,099 15,481 5,227	79 368 498 603 1,219	20 132 266 354 330 881 110

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

TABLE 9.-NUMBER OF SCIENTISTS, BY FIELD AND TYPE OF EMPLOYER, 1964

			TYPE OF EMPLOYER								
SCIENTIFIC AND TECHNICAL FIELD TOTAL	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	MENT		HILITARY		INDUSTRY AND BUSINESS	SELF-	OTHER	EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
ALL FIELOS	223 , 854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
HEMISTRY	63+053	13,616	4+004	888	648	1,679	37,859	- 589	311	3,168	291
ETEOROLOGY	17,907	4,023	2 • 325	658	241	216	8,400	821	87	962	174
YSICS	5,510	527	1.857	78	2,113	152	594	18	16		15
ATHEMATICS	26,698	11,611	2,913	89	473	1,011	8,954	166	25	1,350	106
GRICULTURAL SCIENCES	17,411	7,206	1,113	211	277	828	6,935	115	83	562	81
IOLOGICAL SCIENCES	9,526	2,833	3 • 295	1,440	47	99	1,382	174	36	160	60
SYCHOLOGY	27,135	15,872	2,916	1.203	790	1,775	2,720	647	202		171
TATISTICS	16,804	8,162	1,378	1,901	230	1,574	1,362	1,144	274	658	121
CONOMICS	2,843	778	568	122	31	139	1,055	25	38	66	21
OCIOLOGY	12,143	5,061	1.274	284	83	465	3,967	195	207	510	97
INGUISTICS	2,703	2.080	137	115	10	160	55	20	21	97	8
HER FIELOS	1,351	930	72	25	1	100	64	4	10	126	19
INCK PECCO3	20,770	5.028	1,553	458	578	524	11,074	359	124		93

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 10.-NUMBER OF SCIENTISTS, BY AGE AND TYPE OF EMPLOYER, 1964

	-				TYPE OF	EMPLOYER				<u> </u>	
AGE TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN— MENT	OTHER GOVERN- MENT	MILITARY	NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF-	OTHER	NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER	
ALL AGES	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,517	1,257
10-24	8 • 247 34 • 102	3,844 13,043	324 2•670	136 929	464 1,483	111 972	1,781 11,495	13 100	31 172	1+370	173
10-34	39,896 40,148	14.159 13,017	3,848 4,051	1,292	1,067 825	1,654 1,875	15,845 17,109	308 751	228 234		350 178
10-44	35,831 24,726	11.229 7.796	4,020 3,255	1,294 833	884 541	1,609	15,137 10,152	843	257	464	135 94
10-54	16,921	5,626 4,236	2.381	649 477	174 66	659 430	6,503 3,670	659 538 396	163 141 86	183	69 67
10-64 15-69	6,966 3,428	2.917 1,367	763 311	269 127	15	259 101	1,988	288 212	71 31	206 351	50 45
O ANO OVER	1,992	369 124	51 40	31 11	2	73	205 70	162	17	784 1,054 17	28 30 8

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

AND THE PROPERTY OF THE PROPER

,			,		TYPE OF	EMPLOYER					
WORK ACTIVITY TOTAL	TOTAL	EDUCA- TIONAL INSTI- TUTIONS	MENT	CTHER GUVERN- MENT	MILITARY	NONPROFIT DRGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF-	IDTHER	EMPLCYED	NO REPORT OF TYPE CE EMPLOYER
ALL ACTIVITIES	223,854	77,727	23,405	7,472	5,522	8,722	64,421	4,277	1,434	9,617	1,257
PESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	77.699 25.761 23.260 46.255 24.568 41.209 16.582 26.301 9.617 6.191	19:694 6:047 5:778 2:793	10,242 5,002 4,535 7,442 3,846 203 1,274 3,654	2.006 779 1.148 2.528 908 302 601 1.798	999 531 405 1,854 631 242 180 1,909	4,344 2,334 1,739 2,036 1,257 154 245 1,689	32.741 6.863 15.924 25.563 14,722 170 13.693 10,602	343 80 194 569 203 34 214 2,865	478 210 231 347 171 98 98 358		154 88 57 88 37 80 28 101

(A)INCLUDES DEVELOPMENT AND DESIGN. NOT SEPARATELY IDENTIFIED.
(8)INCLUDES MANAGEMENT AND ACTINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOUPCE - MATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

SABLE 12.-NUMBER OF SCIENTISTS, BY YEARS OF PROFESSIONAL EXPERIENCE AND TYPE OF EMPLOYEY, 1964

YEARS OF PROSESSIONAL EXPERIENCE TOTAL		MENT		HIL I TARY	NGNPROFIT ORGANIZA- TIONS	INDUSTRY 440 BUSINESS	5Et"-	IDTHER	NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER	
ALL YEARS	223,854	77,727	23,405	7,472	5 , 522	€,722	84,421	4,277	1,434	9,617	1,257
YEAR	8,303 34.864 +5.249 42.706 26,304 53,778 12,650	3,464 15,154 16,324 13,030 8,075 16,833 4,827	485 3,147 4,617 4,698 2,995 6,786 677	222 1,183 1,617 1,569 941 1,645 295	458 1,276 908 871 793 721 495	244 1,163 1,958 1,962 1,131 1,919	2,325 10,302 17,752 18,758 11,125 21,160 2,999	19 135 425 927 722 1,781 268	54 195 253 290 170 396 76	1+258 504 270	105 240 137 97 82 226 370

SUURCE - NATIONAL REGISTER DE SCIENTIFIC MO TECHNICAL PERSONNEL. 1964.

TABLE 13.—SALARY DISTRIBUTION OF FULL TIME EMPLOYED CIVILIAN SCIENTICES, BY FIELD, 1964

SCIENTIFIC AND TECHNICAL FICLO	LOWER DECILE	LOWER QUARTILE	MEDEAN	UPPER QUARTILE	UPPER DECILI
AI.L FIELOS	7:100	8,600	11.500	14,000	18;000
CHEMISTRY	7,20C 7,400 7,400 7,400 6,200 6,500 7,300 8,000 7,900 7,300 5,600 7,000	8,700 8,500 9,000 7,000 8,600 7,500 8,500 9,300 9,300 8,500 7,200 8,600	11,000 10,300 10,600 12,000 11,000 9,200 10,700 10,300 12,000 10,100 7,000 11,100	14,600 13,600 12,900 15,000 14,700 11,400 14,500 12,900 14,900 16,000 13,000 11,600	17, >00 17,000 15,500 18,700 18,500 14,000 19,000 16,300 17,200 29,000 16,000 15,000

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 14.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY MELO AND HIGHEST DEGREE, 1964

			HIGHEST	DEGREE		LESS THAN	NC 05000
SCIENTIFIC AND TECHNICAL FIELO	TOTAL	РН.О.	PROFESSIGNAL MEDICAL	MASTER*S	BACHELOR'S	BACHELOR'S	NC REPORT OF DEGREE
ALL FIELOS	11,000	12,000	15,500	10, 300	10,000	10,300	10,600
CHEMISTRY	11.000 10.300 10.600 12.000 11.000 9.200 10.700 10.300 12.000 12.000 10.100 9.000 11.100	13,000 11,000 13,200 13,500 12,000 11,300 11,000 13,000 12,100 10,400 13,500	13.000 	10,000 9,702 11,700 10,560 10,200 8,200 8,000 3,200 11,500 11,000 8,900 7,100 10,800	9,900 10,600 10,300 10,000 11:500 8:400 7,700 9,900 11:500 13,500 12,000 6,300 10,600	10,000 11,500 9,500 11,700 11,500 7,500 10,000 	10,000 10,800 9,800 11,500 12,000 5,000 10,000 12,000 13,000 9,500 12,000

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 15.-MEDIAN ANNUAL SALARIES OF FULL TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD AND AGE, 1964

SCIENTIFIC AND TECHNICAL							AGE						
FIELD	TOTAL	20-24	25-29	30-34	35-33	40-44	45-49	50-54	55-59	60-64	65-69	70 AND OVER	REPOR OF AG
ALL FIELOS	11:000	7,000	8,000	9,500	11,000	12,160	13,000	13,300	13,400	13,300	12,500	12,000	9,10
HEMISTRY	11,000 10,300 10,600 12,000 11,000 9,200 10,700 10,300 12,000 12,000 10,100 9,000 11,100	6;900 5:800 7:400 7:200 5:800 5:000 7:800	8,000 7,400 8,200 8,300 8,900 6,400 6,600 7,600 8,700 3,400 7,800 6,900 8,300	9,902 8,700 9,800 10,600 10,500 7,700 8,400 9,000 10,400 9,700 8,500 7,500 9,900	11,200 10,300 10,600 13,100 12,900 10,400 10,300 12,000 11,500 9,600 8,500 11,900	12,500 11,600 11,500 14,500 13,700 10,000 12,000 11,000 13,000 13,000 10,500 9,300 13,200		14,000 14,700 11,000 14,500 13,000 11,600 13,800 11,800 14,000 15,000 12,000 14,100	13,700 14,000 11,300 15,000 12,100 12,300 14,000 11,500 15,000 17,500 11,600 13,400	13,400 14,100 12,000 14,400 12,600 13,500 11,500 13,600 11,500 11,500 11,500 11,500	12,700 14,000 11,300 10,500 12,700 13,000 10,800 14,500 11,800	12,000 12,000 10,000 9,000 13,000 10,000 12,000	8,70

NOTE - NO MEDIAN HAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.



		ļ							
SCIENTIFIC AND TECHNICAL FIELD	TOTAL	FDUCA- TIONAL INSTI- TUTIONS	FFDERAL GG/ERN- MENT	OTHER GOVERN- MENT	NONPROFIT DRGANIZA- TIONS	INDUSTRY ANO BUSINESS	SELF- EMPLOYED	OTHER	NO REPORT OF 1998 OF Employer
AL!. FIELDS	11.000	9,600	11,003	9,000	12,000	12,000	15;000	11,000	11,000
CHEMISTRY	11,000 10,300 10,600 12,000 11,000 9,200 10,700 12,000 12,000 12,000 19,000	9,300 3,800 10,500 9,300 8,700 10,200 10,000 9,700 10,100 10,000 9,000 8,300	10,990 11,090 10,600 12,000 12,100 7,300 11,000 12,000 13,700 12,900 10,700	8,700 8,760 10,000 9,100 9,500 7,500 9,900 9,900 11,700 10,700	11,000 10,000 12,100 13,000 14,000 10,500 10,300 12,000 15,000 15,000 13,200	11.700 11.000 11.000 13.500 13.500 9.000 12.500 14.109 12.000 14.000 12.000	15,000 12,000 	10.900 9.600  11.500 10.000 11.000 10.400 10.500 14.300	12,000  10,100 11,500 10,400

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALAPY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND VECHNICAL PERSONNEL. 1964.

#### TABLE 17.--MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD AND WORK ACTIVITY, 1964

					WORK	ACTIVITY				
SCIENTIFIC AND TECHNICAL FIELD	TUTAL	RESEAR	CH AND DEV	ELUPMENT	MANAGEM AONINIS	HENT OF		PRODUCTION		NO KEPORT OF WORK
		TOTAL (A)	BASIC RESEARCH	APPLIED KESFARCH	TOTAL (B)	OF NAD	TFACHING	ANO INSPECTION	OTHER	ACTLUIT
ALL FIELDS	11,000	11.000	11,000	11,000	14,500	15,500	8• 300	9,800	10,500	11,200
EMISTRY	11,000 10,300 10,500 11,000 7,200 10,700 12,300 12,300 12,300 10,100 7,000	10.900 10.400 11.000 17.000 11.700 11.700 10.000 11.400 11.400 11.000	11.000 10,300 11.200 22.000 11.000 9.500 10.600 11.500 11.000 11.000	11.000 10.500 11.000 12.000 12.400 9.500 11.500 11.500 11.500 3.400 11.500	15,000 14,100 12,500 17,000 15,500 9,000 14,900 13,000 14,200 16,100 13,500 11,200 15,000	15,200 14,000 14,500 17,300 16,000 11,400 15,500 14,500 14,500 14,500 12,000 16,000	8,900 8,500 10,000 6,760 8,200 9,600 9,000 9,700 9,700 9,100 8,500 7,900	9,500 9,300 9,300 10,000 10,600 7,800 8,400  10,600 11,700	11.000 10.000 9.800 12,000 12.000 8.800 11.900 10.200 13.000 11.000 8.000	11.300 10.800 11.000 13.000 11.000 8.900 10.200 10.800 12.500 11.000 9.000 12.300

(A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY (DENTIFIED.
(8) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE-TEACHING SALARIES REFLECT A COMPOSITE OF ACADEMIC AND CALENDAR YEAR SALARIES FOR SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION. NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

#### TABLE 18.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD AND YEARS OF PROFESSIONAL EXPERIENCE, 1964

			YEAR	S OF PROFE	SSIONAL EX	PER 1ENCE		NO REPORT
SCIENTIFIC AND TECHNICAL FIELD	TOTAL	1 YEAR	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 7EARS	20 OR MORE YEARS 14,000 14,100 12,000 15,200 14,000 12,000 14,100 12,200 14,500 16,000 12,500	OF YEARS OF EXPERIENCE
ALL FIELDS	11.000	7,400	8,000	₹\$600	11,500	12,500	14,000	10,900
CHEMISTRY	11.000 10.300 10.600 12.000 11.000 9.200 10.700 10.300 12.000 12.000 10.100 9.000	7,200 6,900 7,500 8,100 8,000 6,200 7,200 7,500 7,500 6,500	3,000 7,500 8,200 8,600 6,600 7,500 9,100 8,300 8,400 5,100 7,100	9,600 9,800 10,700 10,500 8,000 9,200 9,400 10,300 10,000 9,000 8,000	11,400 10,600 13,500 13,500 9,300 11,000 11,000 12,000 12,000 10,200 9,200	12,200 12,000 10,800 14,600 14,400 10,300 12,400 12,000 13,500 11,200 10,000	14,100 12,000 15,200 14,000 12,000 14,100 12,200 14,500 16,000	11.000 10.000 11.000 9.900 11.000 11.000 10.700 12.000 12.000 10.500 10.200

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SCURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

HJGHEST DEGREG	TOTAL	EDUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF- EMPLOYED	OTHER	NU REPORT OF TYPE OF EMPLOYER
ALL OEGRESS	11+000	9+60C	11,000	9,000	12,000	12,000	154000	11,000	11.000
PH.D	12,000 15,500 10,000 10,000 10,300 10,800	10,500 15,000 7,700 6,600 8,300 9,000	12,900 17,000 10,900 10,000 9,800 10,000	10,900 16,100 8,400 7,800 3,200 9,100	13.000 16.000 19.400 9.900 10.000	15.000 18,000 12,000 10.500 11.000	18,000 20,000 15;000 12,000 14,000	12,200 17,000 10,300 9,900	9+200 10+200

NOTE - NO MEDIAN LAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

#### TABLE 20.--MEDI'N ANNUAL SALARIES OF FULL TIME EMPLOYED CIVILIAN SCIENTISTS, BY WORK ACTIVITY AND TYPE OF EMPLOYER, 1964

				l 1					
WORK ACTIVITY	TOTAL	EDUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	NUNPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF- EMPLOYED	OTHER	NO REPORT OF TYPE OF EMPLOYER
ALL ACTIVITIES	11,000	9:600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	11,000 11,000 11,000 14,500 15,500 3,900 9,800 10,500 11,200	10,200 10,000 10,400 14,000 14,500 8,800 8,700 9,600 10,800	10,600 10,700 10,600 13,000 10,000 9,500 10,300 10,600	8,700 9,000 8,500 10,000 10,600 8,500 7,700 8,900 8,600	11.500 11,000 12.000 15.600 17.000 12.000 10.000 12.000	11,400 12,300 11,500 15,500 16,000 10,500 10,000 11,000 12,000	15,000 14,700 15,000 15,000 19,000 12,000 16,000 16,900	10.400 10.000 10.800 13.500 14.500 8.000 9.900 11.000 12.000	10>700 11,700 10>300 14-100 15>000 9>000 

(A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.

(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE—TEACHING SALARIES REFLECT A COMPOSITE OF ACADEMIC AND CALENDAR YEAR SALARIES FOR SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION. NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

TABLE 21.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY YEARS OF PROFESSIONAL EXPERIENCE AND TYPE OF EMPLOYER, 1964

	TOTAL								
YEARS OF PROFESSIONAL EXPERIENCE		EDUC 1- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF- EMPLOYED	OTHER	NO REPORT OF TYPE OF EMPLOYER
ALL YEARS	11,000	₹ 600	11,000	9,000	12,000	12,000	15+000	11,000	11+000
YEAR	7,400 8,000 3,600 11,500 12,500 14,000	7.000 7.500 8.500 10.100 11.000 12,300 9.500	7.000 3,000 9,900 11.500 12:100 14.000	6,100 6,800 8,200 9,500 9,900 11,000 9,300	7.200 8,400 10.600 13,900 14,400 16.000	7,600 8,600 10,500 12,300 13,800 15,300 11,800	9,000 13,000 15,000 16,000 18,000	7,200 8,000 9,600 11,500 13,000 14,000	8,400 9,500 11,700 12,500 13,900

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.



			SCIENTIFIC AND TECHNICAL FIELD													
STATE TOTAL	TOTAL	CHEM- ISTRY	EARTH SCIF"CES	METEOR- OLOGY	PHYSICS		TURAL	810LOGI- CAL SCIENCES	CHOLOGY	STA- TISTLCS	ECONOM- ICS	DLOGY SGC 1-	LINGUIS- TICS	OTHER FIELDS		
ALL STATES	223,854	63,053	17,907	5,510	26,698	17,411	9,526	27•135	15,804	2,843	12,143	2,703	1.351	20.770		
SELECTED STATES -	£39,437	41,513	9,062	2.726	18,808	11,509	2,988	15.510	11,183	1,978	8.054	1,652	838	13,616		
CALIFORNIA	26,645 24,510			630 348	4.536 3.267			2,827 2,965	2+321 2,713	297 400	1,171	254 372		2 + 80 5		
ENNSYLVANIA EW JERSEY	12,613	4.398	500	97 87	1.572	805	256	1 • 428 796	992 684	133 136	641 427	135 61	59	1,29		
LLINOIS	11,537 10,660	2,509	3,231	238 264	1 · 253 793	601	313	1,490 866	976 456	15 <b>1</b> 86	816 343	163 67	54	969		
HIO	10,135 9,540	2.577	358	284	1,150	901	84	937	729 721	122 92	510 470	128	63	1+08		
ICHIGAN	7,573 7,175 7,605	977	297 666 235	100 32 <b>3</b> 251	724 1.043 1.006	515	184	952 669 1,512	712 495 374		485 1,206 192	1 37 128 78	106	75 56 62		
THER LOCATIONS - "	84,417	21,540	8,845	2.784	7,890	5,902	6,538	11+625	5,621	865	4,089	1.051	513	7,15		

NOTE - INCLUDED STATES WITH 5,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONMEL, 1964.

TABLE 23.-NUMBER OF SCIENTISTS, BY SELECTED STATES AND HIGHEST DEGREE, 1964

			HIGHEST	DEGREE		LESS THAN BACHELOR'S DEGREE	NO REPORT
STATE	TOTAL	PH.D.	PROFESSIONAL MEDICAL	MASTER®S	BACHELOR'S		OF DEGREE
ALL STATES	223,854	79,372	5,925	61,222	72 • 364	2,878	2+093
SELECTED STATES	139,437	49,748	4,024	37, 992	44,545	1.723	1,405
CALIFORNIA	26.645 24.510 12.813 11.844 11.537 10.660 10.135 9.540 7.573 7.175 7.005	9.556 9.222 4.49. 4.77 4.345 7.514 3.257 3.782 2.870 2.814 2.617		7,142 6,697 3,370 3,070 3,301 2,975 2,731 2,558 2,369 2,111 1,668	8.716 6.986 4.309 4.093 3.365 4.728 3.719 2.583 2.048 1.910 2.08	399 298 134 143 119 186 88 119 31 85	297 256 108 140 109 106 104 93 63 71 58
HER LOCATIONS	84,417	29,624	1,901	23,230	27,819	1,155	688

NOTE - INCLUDES STATES WITH 5.000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNACAL PERSONNEL, 1964.

#### TABLE 24.-NUMBER OF SCIENTISTS, BY SELECTED STATES AND TYPE OF EMPLOYER, 1964

			TYPE OF EMPLOYER									
STATE	TOTAL	EOUCA- TIONAL INSTI- FUTIONS	MENT		HILITARY		AND	SELF- EMPLOYED	OTHER	EMPL DYED	NO REPORT OF TYPE OF EMPLOYER	
ALL STATES	223,854	77,727	23,405	7.472	5,522	8,722	84,421	4:277	1 • 434	9,617	1,257	
SELECTED STATES	, 437	43,774	14,432	4+064	2,918	6,697	56+890	2,970	885	6.079	728	
ALIFORNIA	26,645 24,510 12,813 11,844 11,537 10,660 10,135 9,540 7,573 7,175	8,966 8,375 4,394 1,884 4,978 2,610 3,131 3,944 3,311 639	2,186 649 608 448 461 609 934 630 202 4,766	1,135 904 322 170 401 184 280 166 286 80	570 315 51 74 133 307 200 153 53 400	1,391 1,717 582 235 560 165 559 666 182 522	10.195 10.348 5.958 8.242 4.149 5.811 4.364 3.152 3.049	694 721 171 194 211 499 123 121 99 82	119 208 73 43 74 49 81 64 26	1, 125 588 511 505 374 407 586 332 143	145 148 66 43 65 52 56 58 33 27	
ARTLANU	7.005	1+542	2,939	136	662	118	1,229	>>	25	264	35	
THER LOCATIONS	84,417	33,953	8,973	3+408	2,604	2,025	27.531	1.307	549	3 • 5 3 8	529	

NOTE - INCLUDES STATES WITH 5.000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

#### TALLE 25.-NUMBER OF SCIENTISTS, BY SELECTED STATES AND WORK ACTIVITY, 1964

SYATE	TOTAL	RFSEAR	CH AND DEV	ELOPMENT	MANAGEMENT OR ADMINISTRATION			PRODUCTION		NOT EMPLOYED	
		TOTAL (A)	8ASIC RESEARCH	APPLIED RESEARCH	TOTAL (8)	OF R+O	TEACHING	AMO INSPECTION	OTHER		ACTIVITY
ALL STATES	223,854	77,699	35,781	30+280	46+255	24,568	41,209	16,582	26,301	9,617	6,191
SELECTED STATES	139,437	51,864	23,421	20,096	29,428	16+965	22,444	10,614	15,345	6,079	3,663
CALIFORNIA	26.645 24.510 12.813 11.844 11.537 10.660 10.135 9.540 7.573 7.175 7.005	10.558 8.479 4.863 5.136 4.074 2.559 3.567 4.121 2.656 2.504 3.347	4,717 3,944 2,652 1,712 2,092 990 1,344 2,311 1,218 1,225 1,816	3,902 3,090 1,933 2,297 1,550 1,154 1,529 1,272 1,058 1,134 1,177	5,375 5,069 2,517 2,818 2,222 2,020 2,103 1,615 1,445 2,638 1,606	3,130 2,616 1,454 1,894 1,200 809 1,288 1,016 788 1,621 1,149	4,023 4,444 2,403 1,037 2,400 1,552 1,762 1,768 409 660	1.624 1.840 1.095 1.273 959 1.257 926 460 576 243	3,097 2,899 1,045 801 1,065 2,580 893 726 617 1,036	1,125 588 511 505 374 407 586 332 143	724 654 302 268 312 318 277 246 179 202
OTHER LOCATIONS	84,417	25+835	12,360	10,184	16,827	7,603	18,765	5,968	10,956	3,538	2 , 528

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE - INCLUDES STATES WITH 5,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1934.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 26.-NUMBER AND MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STATE, 1964

STATE	TOTAL	MEDIAN ANNUAL SALARY	STATE	TOTAL	MEDIAN ANNUAL SALARY
ALL LOCATIONS	223,854 1,887 452 1,768 770 26,645 3,656 4,149 2,387 7,175 3,708 2,238 742 814 11,537 4,628 2,351	11,000 10,300 10,900 9,800 9,800 12,000 10,500 10,500 10,500 10,000 10,000 10,000 10,000 10,000 10,000 10,800 10,800 10,200 10,000	MONTANA	797 1.118 430 650 11.844 2.023 24.510 3.118 460 10.135 3.112 2.253 12.813 895 1.203 463 3.108	9,000 9,400 9,800 9,500 12,000 11,900 10,000 8,700 10,600 10,800 9,200 11,000
KANSAS	2.088 1.545 3.172 589 7.005 9.540 7.573 3.811 978 3.722	9,300 9,800 10,000 8,800 11,700 11,000 10,300 10,500 9,300 10,300	UTAH	1,570 343 3,741 3,717 1,513 3,912 717 355 3,464	10,000 8,600 10,600 10,000 10,000 9,800 9,500 9,500 11,300

SOURCE - NATIONAL REGISTER P. SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

WCTDDDA	İ		S	CHENTIFIC AND	TECHNICAL	FIELD	
METROPOLITAN AREA	TOTAL	CHENISTRY	EARTH SCIENCES	METEOROLOGY	PHYS I CS	HATHEHATICS	AGRICULTURAL SCIENCES
ALL LOCATIONS	2235034	63,053	17,907	5,510	26, 698	17,411	9,526
SELECTED METROPOLITAN AREAS	91,368	26.729	5,280	1,959	12,547	8,144	1.014
NEW YORK, N.Y WASHI'GTON, D.CMDVA LOS ANGELES-LONG BEACH, CALIF COTICAGO, ILL BOSTON, MASS	11,788	3+689 1+787 1+755 2+831 1+810 1+827 2+565 2+340 1+154 470 671 415 1+757 1+091 813 929	416 896 657 198 228 431 60 34 155 106 122 944 834 17 37 48	280 540 172 127 226 169 43 11 10 39 49 19 105 4	1,627 1,696 1,686 828 1,708 992 598 562 478 278 657 164 340 110 411 232 180	1,424 1,109 1,523 494 719 403 467 273 164 262 429 148 135 40 139 197	63 350 42 39 28 114 60 3 11 154 14 17 72 11 2
OTHER LOCATIONS	- 137,466	36,324	12,627	3,551	14,151	9,267	8,512

		SCIENTIFIC AND TECHNICAL FIELD										
METROPOLITAN AREA	RICLOGICAL	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS					
ALL LOCATIONS	27.135	16,864	2:843	12,143	2,703	1+351	20,770					
SELECTED METROPOLITAN AREAS	10.033	7,617	1+418	6,126	1,060	546	8,915					
NEH YORK, N.Y  MASHINGTO'I, D.CMDVA  LOS ANGELES-LONG BEACH, CALIF  CHICAGC, ILL  BOSTON, MASS		2.027 771 752 647 549 435 439 225 202 263 238 95 174 60 164 240 146	250 442 109 100 76 65 47 40 46 50 54 15 22 22 25 24 21	1,:17 1,357 404 526 357 334 324 173 138 159 1107 00 151 152 104 146	247 179 83 96 100 82 54 16 30 30 27 8 17 5 24 26 36	104 122 58 48 55 51 38 2 7 10 16 7 8 2	1,415 907 1,104 692 553 557 641 509 327 214 348 316 221 330 244 262 275					
OTHER LECATIONS	17,102	9,197	1,425	6,017	1,643	805	11,855					

NOTE - INCLUDES METROPOLITAG AREAS WITH 2,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.



			HIGHEST	DEGREE		LESS THAN	NO REPORT
METROPOLITAN AREA	TOTAL	РН.О.	PROFFSSIONAL MEDICAL	MASTER'S	BACHELOR®S	BACKELOR'S DEGREE	OF DEGREE
ALL LOCATIONS	223,854	79.372	5,925	61,222	72.364	2,878	2.093
SELECTED METROPOLITAN AREAS	91,388	33.785	3+258	24, 24D	28,106	1,070	929
NEW YORK, N.Y	14,870 11,783 9,390 7,615 7,230 6,342 6,197 4,462 2,932 2,898 2,761 2,609 2,594 2,550 2,252	5,469 4,673 3,255 2,744 2,947 2,511 2,150 1,033 1,135 1,143 597 812 1,364 773 693	802 486 214 273 384 179 309 45 58 75 59 41 51 116 48	4.188 3,278 2.641 2.085 1.889 1.505 1,499 1.120 705 693 740 676 (30 484 690 726 591	4,042 3,121 3,019 2,344 1,862 2,015 2,095 1,503 1,028 952 765 1,256 967 715 925 725 772	198 128 139 86 83 70 85 51 17 23 27 39 28 7 22 36 31	171 107 122 83 65 62 59 55 21 20 27 33 21 13 24 28
OTHER LOCATIONS	132,466	731 45,587	2,667	36,982	44,258	1.808	1.164

NOTE - INCLUDES METRUPOLITAN AREAS WITH 2,000 OR HORE SCIENTISTS REPOLITING TO THE NATIONAL REGISTER IN 1964.
SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1954.

TABLE 29.-NUMBER OF SCIENTISTS, BY SELECTED STANDARD METROPOLITAN STATISTICAL AREAS AND TYPE OF EMPLOYER 1964

					TYPE OF	EHPLOYER					
METROPOLITAN AREA	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEOERAL GCVERN- PENT		MILITARY	NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF	OTHCR	NOT EPPLOYEO	NO REPORT OF TYPE OF EXPLOYER
ALL LOCATIONS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
SELECTED METROPOLITAN AREAS	91,388	25,633	11,428	2,050	1,765	5,536	37,942	2 • 058	699	3,822	485
4CW YORK. N.Y	14,870	4,655	423	494	247	1,493	5,954	639	182	673	105
ASHINGTON, D.CMDVA	11,738	1,386	7,011	127	862	696	1,095	117	144	298	52
LOS ANGELES-LONG BEACH, CALIF	9,390	2,792	287	292	55	789	4,367	315	44	395	54
HICAGO, ILL	7,615	2.761	210	177	37	531	3,320	161	1 64	312	42
30STON, MASS	7,230	3.036	537	125	100	516	2.275	90	49		42
AN FRANCISCO-DAKLAND, CALIF	6,342	2,660	615	242	199	391	1,734	136	29		29
HILADELPHIA, PAN.J	6,197	1,691	345	109	39	340	3 + 266	93	36		26
EWARK. N.J	4.467	404	171	23	11	51	3,523	83	11	172	13
ittsburgh, PA	2,932	676	111	25	2	105	1.548	31	14		11 20
INNEAPOLIS-ST. PAUL, MINN	2.893	1.172	162	103	5	43	1,249	23	12		20
AN JOSE, CALIF	2,761	907	265	57	14	54	1.225	45	8		20
OUSTCN. TEX	2.642	432	109	15	18	31	1,827	113	5		11
ENVER, COLO	2.609	658	683	81	59	123	761	88	18		19
ILHINGTON, DELN.JMO	2,594	202	20	10	4	13	2,236	8	2		6
LEVELAND, CHIU	2,550	686	301	42	7	104	1.241	44	19		16
FTROIT, HICH	2,256	659	53	85	14	122	1,171	37	12		9
T. LOUIS, MOILL	2+252	656	124	44	92	39	1+147	35	20	85	10
OTHER LOCATIONS	132,406	52,094	11,977	5,422	3,757	3,186	46,479	2+219	735	5,795	772

NOTE - INCLUDES METROPOLITAN AREAS WITH 2,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND FECHNICAL PERSONNEL, 1964.



					HORK AC	TIVITY					
METROPOLITAN AREA	TOTAL	RESEAR	CH AND DEV	ELOPMENT	MANAGEM AUMINIS	ENT OR TRATION		PRODUCTION		NOT EMPLOYED	NO REPORT OF HORK
		TOTAL (A)	BASIC RESFARCH	APPL JEO RESEARCH	TOTAL (8)	OF R+D	TEASHING	ANO INSPECTION	OTHER		ACTIVITY
ALL LOCATIONS	223,854	77,699	35,781	30+280	46,255	24,568	41,209	16,582	26,301	9,617	6,191
SELFCIED METROPOLITAN AREAS	91,388	35.831	16,797	13 • 635	20,456	12,001	11,765	363.6	10,450	3,822	2,368
NEW YORK, N.Y  MASHINGTON, D.CMDVA  LOS ANGELES-LONG BEACH, CALIF  CHICAGO, ILL  BOSTÓN, MASS	14,870 11,798 9,390 7,615 7,615 7,230 6,342 6,197 4,462 2,932 2,898 2,761 2,642 2,594 2,594 2,550 2,256 2,256	4,637 4,801 3,584 2,901 3,466 2,850 2,518 1,993 1,258 1,180 1,293 682 907 1,166 1,084 747 759	2.318 2.458 1.434 1.393 2.024 1.564 1.035 645 573 537 640 249 513 386 451 274 303	1,649 1,980 1,288 1,152 1,034 979 1,020 896 468 444 402 306 312 581 458 337 329	3.36° 3.811 2.032 1.608 1.181 1.116 1.304 1.127 588 572 516 593 440 660 508 483 540	1,590 2,510 1,250 917 777 632 791 771 368 351 357 247 206 413 314 260 247	2,374 684 1,368 1:147 1,087 829 896 317 402 508 376 211 378 90 329 431 318	1 • 147 394 629 690 290 380 573 472 246 201 127 343 142 309 238 235 280	2,237 1,474 1,136 568 651 517 293 255 234 192 660 559 216 228 210	673 298 395 312 457 306 253 172 129 109 166 81 109 93 90 94	435 326 246 193 181 170 136 88 54 94 66 67 74 60 73 51
OTHER LOCATIONS	132,466	41,868	18,984	16,645	25,799	12,567	29,444	9 • 886	15.851	5,795	3.823

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE - INCLUDES METROPOLITAN AREAS WITH 2,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

## TABLE 31.—NUMBER AND MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS. BY STANDARD METROPOLITAN STATISTICAL AREA, 1964

L OCAT 10N	YOTAL	MEO I AN ANNUAL SALARY	LOCATION	TOTAL	MEO I AN ANNUAL SAL ARY
ALL LOCATIONS	223,854	11,000	KENOSHA, HIS	1,345	
STANDARD METROPOLITAN STATISTICAL AREAS	166,753	11,300	LAFAYETTE, LA	136	
ABILENE. TEX	156 983	9,000	LANCASTER, PA	995	10,800
AKRON, OHIO	32	!	LAKEUD, IEX	12	10,000
ALBANY-SCHENECTAUY-TRUT, N.Y	655	1 12.3001	I LINKENCE-HTACKUTECA WASSA MAN	86	10,100
VELENTONN-BETHERHEA-CASTONA LAS 1442	١6		I LEMIZION-MODOKU! DATAC -	14	10-800
AMARILLO, TEX	1,160	12,800	LIMA, UNIO	- 34 - 514	9,700
ANN ARBOR, AICH	142	9,600	IL FILLE KOCK-MOKIN FILLE KOCK 474	- 194 - 140	10,000
ATLANTA, GA	۵۵ ل	112,100	1: FD2 WURLE2-FOUR SENCIT CHET.	- 9,390 - 524	10,500
AUGUSTA, GAS-C	827	9,600	[AMELL	110	9,300
BAKERSFIELD, CALIF	1.879	1 11.000	II LANCHROKE: A#	91	8,600
BATON ROUGE, LA	70	11,000	MADISON: WIS		
BEAUMONT-PORT ARTHUR, IEA	1:3	9,700	MAYAGUEZ, P.R	38	10,100
BINGHAMPTON, N.YPA	349	11,800	MERIDEN, CONY	545	10,000
BOISE CITY, IDAHU	7.230	11,500	MIDLANO, TEX	87	
BRIOGEPORT, CONN	- 44	9,800	I MINNEADOLIS-21. PAGEA MINNE	יוור ל	7 10,100
BRONASAILLE-NAKLIASEN-2VA PEALLOLLEV	1 1 500	10.800	MONROE + LA	ه ا	9 8,700
CANTON, OHIC	. J in:	9,600	MUNCIE, INO	_ 5	9 10,700
CHAMPAIGN-URBANA, IEC	15	7   9.8GC		J 1	8
CHARLESTON, H.VA	22	4   10,003	INCH BRITAINS COM	1.19	0 10,300
CHATTANOUSA, TENNGA	7.61	9   9,700 5   11,200	DI NEW LONGON-GROTON-NORWICH, CONN	28	8 10,300
CINCINNATI, OHIO-KY-IND	2.55	8   10,700 0   11,00	O    NEW YORK + N.Y	46ءد لہ	2 12,100
COLORAGO SPRINGS, COLO		7   10,30 4   9,80	O NEWPORT NEWS-HAMPTON. VA	22	9,000
COLUMBUS. GAALA	1 . 74	n I 11.00	DINURALK, CONT -		12,200
CORPUS CHRISTI, IEX	1,39	9   11.70	O II OGOENA UTAH		9,600 9 10,200
OAVENPORT-ROCK ISLAND-MELINE, TOWN TEE	و ا	7   11.00	Oll DWN: We we see - I own -	20 الــ	71 10,500 90 11,000
DECATUR, ILL	11 2,60	7   10,30	O   DREAMUT, FEA	1,2	11,300
OES MOINES, IONA	2.29	66 10.90	O PERSACULAR TELL	2	
OUBUQUE, TOWA	1/	42 I 8.40	ID II PHUENIX ARIZ		
OURHAH, N.C	1 1	49.60	101: bill26:efn* ww22	_ !	94 11,600
ERIE, PA		27   10,00 38   9,30	ON PORTLANO, MAINE	1 7	69 8,000 32 10,000
EVANSVILLE, INOKY		08   13,00 30   ~	ON PORTLAND, OREG. WASH	6	76 9,600 96 8,800
FARGO-MODRHERO, N. DAR STA		74   9,00 31   10,00	nall PUEBLO, COLO ~	11	53 8.400 20 10,000
FLINI, MICH		17   9,90 75   10,30	noll RALEIGH, N.C	_	01 10,000 33 9,000
FORT SHIM, ARK-DREA	1	18 78 9,8	DO I RENO. NEV		80 9.800 41 10.600
FORT WORTH, TEX	_ 1 2	42   10, B 08   9, B	on I ROANOKE. VA	1 1.5	46 9,400 152 12,000
GAOSDEN, ALA	_ 」 2	44 11.5	ooll ROCKFORD, ILL		51 9,800 396 11,000
GALVESTON-TEXAS CITY, TEX GARY-HAMMOND-EAST CHICAGO, IND	- 1 1	26 12,1 78 9,0	OO II SAGINAW. MICH		22
GRAND RAPIOS, MICH		56 9,6 54 9,0	OO! ST. LOUIS, MO-TILL	1	252 11,200 796 10,100
GREENSBORD-HIGH POINT, N.C	1	65 9,2	00 SAN ANGELO, TEX	-1	32 <del></del> 543 10,000
HAMILTON-MIODLETOWN, OHIO		20 9,3	OO SAN ANTONIO, TEX		842 10,800 471 10,900
HARTFORD: CONN		747   10,9 590   10,3	INN I SAN FRANCISCU-UAKEANU, CALIF		342 12,000 761 12,600
HOUSTON, TEX	l i	161 9,0	OO SAN JOSE, CALIF	- 1	215 9,500 437 12,200
HUNTINGTON-ASHLAND, W.VAKTOHIO HUNTSVILLE, ALA		500   11.7 905   10.5	OO   SANTA BARBARA, CALIF		118 9,400 67 8,300
INDIANAPOLIS, INU	· <b>-</b> -	41 9,3	OO   SCRANTON, PA		708 11,000 259 10,000
JACKSON, MISS	:	147 9,1	300   SHREVEPORT, LA		45 7,900
JERSEY CITY, N.J		42 7. 405 12.	SIOUX CITY, IONA-NEB	: - : : :	312 9,700 134 8,600
KALAMAZOO, MICH		775 10.	300    SPOKANE, WASH	ı	ī

## TABLE 31.—NUMBER AND MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS. BY STANDARD METROPOLITAN STATISTICAL AREA, 1964—CONTINUED

L OCAT I UN	TOTAL	MEDIAN ANNUAL SALARY	LOCATION	TOTAL	MEDIAN ANNUAL Salary
STAYDARD METROPOLITAN STATISTICAL  AREAS - CONTINUED  SPRINGFIELD, HO	80 35 386 476 31 104 1,000 220 315 189 8 421 156 1,515	8,800 9,300 10,300 12,700  9,000 9,000 9,500  10,200 9,700	OTHER LOCATIONS	102 125 11,786 186 42 65 32 401 10 86 2,594 195 341	7,50 9,90 12,60 10,60 9,20 10,60 7,80 13,59 10,40 10,00 3,20 8,70

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SCURCE - MATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

#### TABLE 32.-NUMBER OF SCIENTISTS WITH A KNOWLEDGE OF SELECTED FOREIGN LANGUAGES, BY T'ELD, 1964

			S	CIENT	IFIC AND	TECHNICAL	FIELD	
<b>LANGUAGE</b>	TOTAL	CHEMISTRY	EARTH SCIENCES	METE	DROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
GERMAN	124,343 107,400 36,996 8,167 4,957 2,407 1,753 1,468 1,384 1,220 1,173 1,160 1,115	44,316 31,352 5,853 1,904 1,414 567 667 283 598 263 332 350 133	6,910 6,023 6,741 792 261 131 48 29 74 98 87 56 241	] ;	2,107 1,578 1,088 242 121 168 27 14 6 33 16 29 41	18,366 14,568 2,590 1,982 597 307 205 259 310 140 212 133 86	9,400 8,943 2,473 906 614 210 129 214 13 89 77 101 60	2 • 951 2 • 600 1 • 861 115 81 76 40 13 27 79 36 6
		· <del>1 · · · ·</del> -	SCIEN	TIFIC	AND TECH	MICAL FIEL	.9	
LANGUAGE	BIOLOGICAL SCIENCES		GY STATE	STICS	ECONOMIC	Sector	OCY LINGUIST	ICS OTHER FIELDS
RERHAN	17.002 16.253 4.587 523 617 347 172 113 194 177 138 145	6,98 9,38 3,97 314 499 119 109 241 25 76 53	1,	214 271 543 105 66 41 24 32 3 19 9	4,52; 5,91; 2,97; 34; 32; 150 97 83 65 103	6		7,229 3,256 715 418 199 183 117 103 83 61 94

NOTE - INCLUDES LANGUAGES WITH 1.000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

TABLE 33.—NUMBER OF SCIENTISTS WITH A KNOWLEDGE OF SELECTED FOREIGN LANGUAGES, BY PROFICIENCIES, 1964

			PROFICIENCY								
LANGUAGE	TOTAL	CAN PREPARE AND OELIVER LECTURES		CAN CONVERSE		HAVE FACILITY TO TRANSLATE TECH- NICAL JOURNALS		CAN READ TECHNICAL ARTICLES FOR OWN USE		SOME KNOWLEDGE BUT CAN'T USE AS A MEDIUM OF	PROFIC-
		FLUENTLY	SUPER- FICIALLY	FLUENTLY	PASSABLY	INTO ENGLISH	FROA ENGLISH	EASILY	WITH DIFFICULTY	CATION	IENCY
ERMAN	123,944	5,780	9+865	7,178	24,437	42,268	9,566			32,121	54
RENCH	106.860						6,999			25,424	60
PANISH	36,596						3.733			13,837	15
USSIAN	8,020	559	779				800			2,541	] 3
TALIAN	4,890	755					855			925	1 1
APANESE	2,352						617			623	1
SLISH	1,725	562					492			20%	] 2
EBREW	1,439	470					405			289	2
THER CHINESE	1,377	946					628			76	1
UTCH	1,147	494	145	541			444			106	2
WEDISH	1,193	188		280			163			224	
ODERN GREEK	1,141	124	200	612			352			195	
ORTUGUESE	1,062		267	303	466	599	228	638	185	159	

NOTE - INCLUDES LANGUAGES HITH 1.000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 34.—I.J. BER OF SCIENTISTS WITH A KNOWLEDGE OF SELECTED FOREIGN AREAS, 8Y FIELD, 1964

; ;						sc	IENTIFIC A	AND TECHNI	CAL FIEL	.0				
<b>A</b> REA	TCTAL	CHEH- ISTRY	SARTH SCIENCES	METEOR- OLOGY	PHYSICS		TURAL	810L0G1- CAL SCIENCES	CHOFOGA bza-		ECONOH- ICS	SOC 1-	LINGUIS- TICS	OTHER FIELOS
ALL AREAS	223,854	63•053	17+907	5,510	26.698	17,411	9,526	27,135	16,804	2,843	12,143	2.703	1,351	20,770
SELECTED FOREIGN AREAS	31,826	7.234	2+396	1,429	3,521	2,406	930	4 , 946	2,247	396	2.630	707	497	2-487
GREAT BRITAIN	5,251			255	773	388		962	374	72	360	87	25	337
GERMANY CANADA, ST. PIERRE AND MIQUELON	4:469	1.312	146	175	630	388	116	490	328	43	279	88	87	387
ISLANDS	3,750	829	682	101	295	305	178	491	259	40	217	35	6	312
GENERAL	3,305	700	212	221	326	214	93	411	254	36	459	69	24	, 286
JAPAN	2,793	512	169	348	260	255	78	\ 396	166	42	235	59	36	242
MCNACO	2,067	439	91	57	262	237		297	179	2 %	161	50	66	187
KEXICG	1.874	272	338	23	70	76	1	424	131	15	118	66	73	173
CENTRAL AHERICA	1,662	174	249	89	40	56		46ú	78	13	268	53		115
INDIAN SUBCONTINENT	1,570	1	125	33	143	1	1	236	96	53	175	76	1	117
PENINSULA AUSTRIA, LIECHTEN-	1,458	325	] 87 ]	52	211	89	35	294	91	18	96	53		83
STEIN. SWITZERLAND	1,431	474	48	12	235			212	132	j 9	79	11		70
ITALY	1,121			28	126			173	111	12	96	27		100
CHINA	1,075	268	54	35	150	100	23	154	48	22	83	33	26	79
OTHER FOREIGN AREAS	15,669	2,704	2,465	819	1,200	879	606	2,386	837	211	1+360	419	437	1,346
NO REPORT OF FOREIGN AREAS	176,359	53-115	13.046	3,262	21,977	14.126	7,990	19.603	13,720	2,236	8, 153	1,577	417	16,93

NOTE - INCLUDES AREAS WITH 1,000 OR MORE SCIENTISTS REPORTING TO THE NATIONAL REGISTER IN 1964.

			<del></del>
SUBF1ELD	MED I AN SAL ARY	208c1EfD	MEDIAN SALARY
ALL SUSFIELDS	11.000	FORESTRY	0 /00
ANALYTICAL CHEMISTRY		il nuki ituuliuke —	8,600 10,400
INORGANIC CHEMISTRY		OTHER BIO-MEDICAL SPECIALTIES	
ORGANIC CHEMISTRY	100000	BIOLOGY, OTHER	8,000
RELATED SHEMICAL SPECIALTIES	13 000	CLINICAL PSYCHOLOGY	1
CHEMISTRY, OTHER	,	COUNSELING AND GUIDANCE	10,100
	1	DEVELOPMENTAL PSYCHOLOGY	,,,
ACOUSTICS	12.000	# FOUCATIONAL PSYCHOLOGY	7,000
ATOMIC AND HOLECULAR PHYSICS	1 11 700	ENGINEERING	10,300
ELECTROMAGNETISM	1		
MECHANICS	.07 200	INDUSTRIAL AND PERSONNEL PSYCHOLOGY	13.200
NUCLEAR PHYSICS	1	11 bekanudriii	10,000
			9,400
Physics of filling	127 700	PSYCHOLOGY, OTHER	10,500
SULID STATE PHYSICS	1	APPLIED SOCIOLOGY	
INCKMAL PHYSICS			11,800
OTHER PHYSICS SPECIALTIES	8,900	METHODOLOGY - ~	8,900
PHYSICS, OTHER	10,800	FOPULATION	11,000
ASTRONOMY		! RURAL-URBAN SOCIOLOGY	11,200
	11,500	SCCIAL CMANGE AND DEVELOPMENT	11,500
ATHOSPHERIC DYNAHICS, CHEMISTRY, AND PHYSICS		SOCIAL ORGANIZATION. STRUCTURE. AND INSTITUTIONS	10.000
		SUCLAL PROBLEMS: SOCIAL DISORGANIZATION	10,100
SVADITIC METEROPIACO	10+800	SOCIULOGY, OTHER	10,000
METEOROLOGICAL INSTRUMENTATION	12.000	GENERAL ECONOMIC THEORY	10,600
METEUROLOGY, OTHER		ECONOMIC SYSTEMS, DEVELOPMENT AND PLANNING	9,800
		ILECONOMIC STATISTICS = = = = = = = = =	12,100
GEOLOGY	12,000	MONETARY AND FISCAL THEORY AND INSTITUTIONS	11,000
PALEONTOLUGY	10.300	INTERNATIONAL ECONOMICS	11,400 12,500
SOLID-EARTH SEOPHYSICS	9,200	BUSINESS FINANCE AND ADMINISTRATION, MADRETING AND	121300
(atus) (A A A A A A A A A A A A A A A A A A A		ACCOUNTING	13,000
HYOROLOGY	8,800		
OCEANOGRAPHY	10.500	INDUSTRY STUDIES	13,000
ATMOSPHERIC, . (HOSPHERIC, AND HYDRUSPHERIC SPECIALTIES, OTHER	10, 50,	CABOR ECONOMICS	11.300
SPECIALTIES, OTHER	11,000	POPULATION, HELFARE PROGRAMS, STANDARDS OF LIVING	12,000
1. CCO.		ECONOMICS, OTHER	12,000
ALGEBRA	8,200		13.000
GEOMETRY	9,000	APPLICATIONS TO LANGUAGE TEACHING	8+600
LOGIC	8+4001	DESCRIPTIVE   INGHISTICS = = = = = = = = =	8,500
MATHEMATICS OF RESOURCE USE = = = = = = = = = [	A. T.O. 1	IGENERAL PINGUISTICS = = = = = :	-
NUMBER THEORY	8.600	HISTORICAL AND COMPARATIVE LINGUISTICS	10.00C
NUMERICAL METHODS AND COMPUTATION	12,000	LANGUAGE IN RELATION TO OTHER FIELDS	9+600
TOPOLOGY	7,0001	ILITERALY AND WRITING SYSTEMS	
PROBABILITY	110641111	IMPIHANITED ADDITCATIONS	
DAILE JAIT (2) DIHFK	8,500	PHONETICS	
FNATOMY	J.	LINGULSIICS	*****
	10,500		
ECOLOGY	9,000	AGRICULTURAL AND FOOD CHEMISTRY	11,000
ENTOMOTORY	10.000	BIOCHEMISTRY	11,000
GENETICS	10,000	BIOPHYSICS	12,000
IMMUNOLOGY - ~	12.000	EXPERIMENTAL, COMPARATIVE, AND PHYSIOLOGICAL	12,500
MICOCUITO CO	10,200	PSYCHOLOGY	10.555
WIITD I T ION		PHYSICAL CHEMISTRY	10.000
			12:000 11:300
	43000 H	SUIL SPELIALISES	10-300
PHYTOPATHOLOGY	12,300	20CTUE	10,500
VIROLOGY	10,200		-07700
	14,100	STATESTICS	12,000
AGRONCHY	8,500	ENGINEERING	
ANIMAL HUSBANDRY	10,300	CUNTUCCKIUR	12,000
FISH AND WILDLIFE	8,100	OTHER SPECEALTIES	
		Attick Attribution	8,900

NUTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

		NUMBER	GOVERMMENTAL PROGRAMS						
SCIENTIFIC AND TECHNISAL FIELD	iotal	RECEIVING SUPPORT	AGR 1 CULTURE	ATDMIC ENERGY	OEFENSE	EOUCATION	HEALT		
ALL FIELDS	223,854	97,004(1)	10,957	11.267	29+399	8,679	20,73		
:KEMISTRY	63,053	19.305	1,582	3,361	5+667	1,280	6.02		
ARTH SCIENCES	17,907	4+808	226	371	1,232	340	15		
BETEOROLOGY	} 5 <b>,</b> 510	4.814	327	223	2,428	136	20		
HYSICS	26,698	16,718	60	4,371	8,100	1.055	42		
ATHEMATICS	17,411	7.818	63	554	4,397	898	35		
GRICULTURAL SCIENCES	9,526	6,406	3.701	93	147	157	13		
10LOGICAL SCIENCES	27, 135	16.123	3,247	957	1.122	1,371	9,11		
SYCHOLOGY	10.804	61397	44	56	1 • 178	1.666	2.89		
TATISTICS ·	2,843	1,484	95	81	578	88	27		
CONOMICS	12,143	3+589	1+275	115	557	255	14		
OCIOLOGY	2,703	985	114	3	65	226	44		
INGUISTICS	1,351	403	3	4	92	194	3		
)THER FIGLOS	20,770	8,154	220	1,078	3 • 836	1.013	51		

		GGVERNMENTA	L PROGRA	MS		NO	SUPPORT	
SCIENTIFIC AND TECHNICAL FIELD	INTERNATIONAL	NATURAL RESOURCES	PUBLIC HORKS	SPACE	OTHER	SUPPORT	STATUS UNKNOWN	ND REPORT
ALL FIELOS	1.835	6+822	1,298	13,625	13,144	104,853	6,134	15,863
CHEMISTRY	129	740	132	2,772	1,815	36,903	2,303	4,542
EARTH SCIENCES	191	1,624	336	319	1,064	11,238	314	1.547
METEOROLOGY	143	214	105	656	1,585	440	45	211
PHYSICS	113	112	44	4,607	1,762	6,838	648	2,494
MATHEMATICS	71	76	68	1,933	1.108	7.874	535	1,184
AGRICULTURAL SCIENCES	76	2+500	155	j 11	476	2.642	157	321
STOLOGICAL SCIENCES	195	751	31	450	1,619	8,756	529	1,72
PSYCHOLOGY	126	19	21	323	1,163	8,622	661	1,12
TATISTICS	37	36	23	229	376	1,152	70	13
CONOMICS	477	333	122	234	991	7,536	198	82
OCIOLOGY	68	12	13	16	263	1.512	35	17
INGUISTICS	51	2	2	1	87	719	63	16
)THER FIELOS	158	403	246	2.074	337	10.621	576	1.41

(1)OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FFDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM OD NOT ADD TOGOTAL.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

TABLE 37.-NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT. BY HIGHEST DEGREE AND PROGRAM, 1964

		NUMBER RECEIVING SUPPORT	GOVERNMENTAL PROGRAMS						
HIGHEST DEGRIE	TOTAL		AGRICULTURE	ATOMIC ENERGY	OEFENSE	EOUCATION	HEALTH		
ALL DEGREES	223,854	97,004(1)	10+957	11,267	29,399	8.679	20.736		
PH.O	79:372 5:925 61:222 77:364 2:878 2:093	39.613 4.235 23.752 27.116 1.549 739	5 • 501 77 2 • 618 2 610 92 59	5.093 130 2.694 3.239 67	8,954 271 8,360 10,600 871 343	4,400 246 2,611 1,353 26 43	12,204 3,641 2,470 2,298 52		

		GOVERNMENTA		NO	SUPPORT	NG		
HIGHEST DEGREE	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER	SUPPORT	STATUS UNKNOWN	REPORT
ALL DEGREES	i+835	6+822	1,298	13,625	13,144	104,853	6.134	15.863
PH.D	890 44 439 401 36 25	1,610 4 1,859 3,216 87 46	231 2 320 683 50 i2	4,309 94 3,914 4,984 190 134	5,538 248 3,164 3,642 399 153	34,188 1,397 30,065 37,027 1,080 1,096	1,312 67 2,039 2,561 71 84	4+259 226 5+366 5+660 178 174

(1)OF THIS NUMBER. 20.758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING HUMBER OF SCIENTISTS BY PROGRAM OD NOT ADD TO TOTAL.

		NUMBER	GOVERNMENTAL PROGRAMS						
TYPE OF EMPLOYER	TOTAL	RECEIVING SUPPORT	AGRICULTURE	ATOMIC ENERGY	OEFENSE	EOUCATION	HEALTH		
ALL EMPLOYERS	223,854	97,004(1)	10,957.	11,267	29.399	8,679	20,736		
EDUCATIONAL INSTITUTIONS	77.727 23.405 7.472 5.522 8.722 84.421 4.277 1.434 9.617 1.257	37,915 23,405 3,646 5,522 5,314 19,771 620 593	5,275 4,650 512 9 137 256 42 30	5,259 1,001 206 176 723 3,675 49 157	4.896 6.046 137 3.624 1.933 12.488 145 90	7,117 520 301 110 342 148 59 56	12,797 2,788 1,092 590 2,226 796 241 154		

	GOVERNMENTAL PROGRAMS						SUPPORT	NO
TYPE OF EMPLOYER	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OYHER	SUPPORT	STATUS UNKNOWN	REPORT
ALL EMPLOYERS	1,835	6,822	1,298	13,625	13,144	104,853	6,134	15,863
EDUCATIONAL INSTITUTIONS	556 676	1,138	144 570	2,374	5,293 4,865	33,101	3,142	3,569
FEOERAL GOVERNMENT	43 60	931 22	260 21	83 308	599 1.012	3,245	366	215
NONPROFIT DAGANIZATIONS	169 242	139 376	43 223	763 7+805	508 632	2,926 61,193	243 2,231	239 1,226
SELF-EMPLOYED	19 63	27 22	26 11	75 53	103 98	3,418 741	82 45	1 57 55
NOT EMPLOYED	7	14		19	34	229	25	9,617 785

(1)OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM OD NOT ADD TO TOTAL.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1984.

#### TABLE 39 .-- NUMBER OF SCIENTISTS RECEIVING FEOFRAL SUPPORT. BY WORK ACTIVITY AND PROGRAM, 1964

		NUMBER	GOVERNMENTAL PROGRAMS						
MORK ACTIVITY	TOTAL	RECEIVING	AGR I CULTURE	ATOMIC ENERGY	OEFENSE	EJUCATION	HEALTH		
ALL ACTIVITIES	223,854	97,004(1)	10,957	11,267	29,399	8:679	20,736		
ESEARCH AND DEVELOPMENT (A)	77+699	45.703	5,432	6,618	13,709	1,792	21,342		
BASIC RESEARCH	35,781	25,041	2,690	4,087	40864	1.233	8,730		
APPLIED RESEARCH	30.280	15,728	2,689	1,723	5,905	502	2.468		
ANAGEMENT OR ADMINISTRATION (8)	46,255	21,652	2,728	2,340	8,708	1,482	3,087		
RESEARCH AND DEVELOPHENT	24,568	12.886	1,335	1,651	6,056	676	1,995		
EACHING	41,209	13,778	1,208	978	40647	4,512	3,754		
RODUCTION AND INSPECTION	16,582	3,630	341	608	1,613	43	396		
THER	26,301	9,731	861	530	3,116	657	1,581		
DT EMPLOYED	9,617								
O REPORT	6,191	2,510	387	193	606	193	516		

		GOVERNMENTA	L PROGRA	MS		NO	SUPPORT	NO
WORK ACTIVITY	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER	SUPPORT	STATUS UNKNOWN	REPORT
ALL ACTIVITIES	1,835	6+822	1,298	13 • 625	13, 144	104,853	6,134	15+863
RESEARCH AND DEVELOPMENT (A)	431 189 217 726	2,231 1,130 1,011 2,749	237 59 142 481	7,291 2,634 2,930 3,853	4,807 3,319 1,280 2,527	27,443 7,945 13,285 -23,600	2,498 1,259 860 399	2.055 1.536 407 604
MANAGEMENT OR ADMINISTRATION (B)	412 255 65	1.022 458 230	173 51 163	2 • 973 603 736	1,244 2,476 363	11,202 24,456 12,007	166 1,479 751	314 1,496 194
OTHER	296 62	965 	340	870 	2,426	15,165	145	543 9,617 1,354

(1)OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM HORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS 84 PROGRAM DO NOT AOD TO TOTAL.

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

		NUMBER		GOVERNME	NTAL PROG	RAMS	
STATE	TOTAL	RECEIVING SUPPORT	AGRICULTURE	ATONIC ENERGY	OEFENSE	EDUCATION	HEALTH
TOTAL	223,854	97,004(1)	10,957	11,267	29,399	8,679	20,736
ALASKA	1,887	1:142	214	21	302	62	168
ARIZONA	452 1.768	311 900	44	4	51	13	18
ARKANSAS	770	369	214 113	46	233	78	127
CALIFORNIA	26,645	14,487	968	1,894	50 6,126	24 990	71 2,209
COLORADO	3.656	2,086	225	256	510	175	277
CONNECTICUT	4:149	1+653	115	175	600	138	351
OISTRICT OF COLUMBIA	2,387 7,175	263 6,195	33	26	129	14	36
FLORIOA	3.708	1,870	584 264	339 98	1.929	359	813
GEORGIA	2.238	1.079	248	57	572 202	185 111	381 325
HAWAII	742	438	92	20	129	41	70
IDAHO	814	545	143	183	23	41	18
INDIANA	11,537 4,628	3+881 1+404	425	821	746	519	1,050
IOWA	2.351	1,020	245 232	171 278	293	225	368
KANSAS	2,088	806	169	51	75 125	135 132	262 229
KENTUCKY	1,545	609	128	55	75	79	185
LOUISIANA	3,172	882	273	25	105	87	219
MARYLAND	589	250	59	11	39	39	52
MASSACHUSETTS	7+005 9+540	5,480 4,963	586	301	2+115	202	1,486
MICHIGAN	7.573	2,398	126 253	381 183	2,168 536	378	1 • 322
MINNESOTA	3,811	1,482	259	98	293	349 190	731 443
MISSISSIPP1	978	414	166	14	48	44	76
MISSOURI	3,722	1+435	211	101	337	159	428
NEBRASKA	797 1•118	429	139	3	28	31	58
NEVADA	430	555 274	172 52	23 91	123 51	42	113
NEW HAMPSHIRE	650	334	63	16	74	10 40	19 97
NEW JERSEY	11,844	2+956	147	262	1,507	255	421
NEW YORK	2+023	1+455	130	732	460	51	67
NORTH CAROLINA	24+510	8+272	407	1.037	2.376	964	2 = 652
NORTH DAKOTA	3+118 460	1+333 275	290 107	95 9	238	1 32	<b>453</b>
OHIO	10,135	3,590	255	521	1,102	41 368	29 833
OKLAHOHA	3+112	770	151	34	150	92	833 395
OREGON	2+253	1,196	306	55	86	129	291
PENNSYLVANIA	12,813	4,434	388	549	1,383	438	1 • 185
SOUTH CAROLINA	895 1•203	421 534	39	43	139	51	111
SOUTH OAKOTA	463	276	122 127	205 5	84 24	28 34	54 30
TENNESSEE	3,108	1,656	150	888	125	123	216
TEXAS	10+660	2,819	345	188	950	269	533
VERMONT	1,570	923	124	56	308	58	184
VIRGINIA	343 3,741	15 <b>7</b> 1•967	43	4	13	21	61
WASHINGTON	3,717	2,053	153 251	130 452	981 444	131 194	253 349
WEST VIRGINIA	1,513	364	81	12	36	36	70
WISCONSIN	3,912	1,464	261	145	183	195	436
WYOMING	717	269	91	12	9	26	15
FOREIGN	355 3•464	169	24	27	23	20	26
	31404	1,697	150	37	668	125	180

• ;

TABLE 40.-NUMBER OF SCIENTISTS RECEIVING FEOERAL SUPPORT, BY STATE AND PROGRAM, 1964-CONTINUED

		COVERNMENTA	AL PROGRA	MS				
STATE	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER	SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
TOTAL	1,835	6+822	1,298	13,625	13,144	104.853	6,134	15,863
ALABAMA	5	63	8	304	99	635	30	80
ARIZONA	2	99	12	29	76	120	8	13
ARKANSAS	7	139	1.7	75	122	681	48	139
CALIFORNIA	155	51 687	177	9	56	333	23	45
COLORADO	40	471	46	3,994 269	1,325 334	9,478	641 75	2:039
CONNECTICUT	21	53	15	284	221	2,025	117	235 354
OELAWARE	i	4		45	28	1,941	61	122
FLORIDA	440	591	139	520	1,998	729	43	208
GEORGIA	33 9	132 97	15	331	282	1,326	119	393
HAWAII	17	50	19	66 22	152 71	949 248	49 14	161 42
IOAHO	1	146	9	4	36	217	12	40
INDIANA	39	103	51	264	557	6,361	418	877
IOWA	12 11	43 34	14	111	206	2,663	174	387
KANSAS	15	56	10 14	41 37	105 137	1.057 1.043	97	177
KENTUCKY	8	82	12	17	78	773	65 68	174 95
LOUISIANA	16	66	10	86	115	2,046	81	163
MARYLAND	1	39	5	11	38	288	7	44
MASSACHUSETTS	73 84	175 135	28 38	703	663	1,025	93	407
MICHIGAN	40	173	30	964 237	564 368	3,391 4,375	237 256	949 544
MINNESOTA	6	129	14	180	169	1,937	117	275
MISSISSIPPI	4	57	26	12	45	490	18	56
MONTANA	15 3	89	28	152	221	1,932	90	265
NEBRASKA	3	150 48	11 11	7 7	67 75	306 456	8 24	54
NEVAOA		58	14	21	29	128	6	83 22
NEW HAMPSHIRE	2	26	6	26	37	232	17	67
NEW MEXICO	24	91	21	576	285	7,708	426	754
NEW YORK	142	124 199	15 68	174 1,012	9L 1,049	435	30	193
NORTH CAROLINA	17	127	22	74	199	13,529 1,429	832 94	1,877 262
NORTH OAKOTA		67	3	2	37	150	3	32
OKLAHOMA	35	165	37	741	398	5,580	325	640
OREGON	9	84 346	15	61	124	2,068	81	193
PENNSYLVANIA	42	233	35 67	17 589	171 556	815 6,986	54	188
RHOOE ISLANO	2	21	i	25	63	346	451 19	942 109
SOUTH CAROLINA	2	29	3	20	54	574	33	62
TENNESSEE	1 9	47	3	4	38	151	6	30
TEXAS	31	108 178	20 42	109 544	139	1,211	72	169
UTAH	9	142	25	82	387 124	6,937 506	256 24	648 117
VERHONT		23	i	3	17	150	7	29
VIRGINIA	27	103	29	342	203	1,444	70	260
WEST VIRGINIA	23 3	229	46	194	262	1,337	79	248
WISCONSIN	19	85 160	15 13	35 94	54 206	1,021	43	85
WYOHING		112	19	1	33	397	145	391 40
PUERTO RICO	9	15	4	6	35	150	9	27
FOREIGN	369	68	19	32	345	1:572	48	147
<u> </u>	<u></u> i		l					

(1) OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM JC NOT AGO TO TOTAL.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 41. -- NUMBER AND PERCENT OF SCIENTISTS, BY FIELD AND SEX, 1964

		м	IALE	F	EMALE				
SCIENTIFIC AND TECHNICAL FIELO	TOTAL	NUMBER	PERCENT DISTRIBUTION	NUMBER	PERCENT DISTRIBUTION				
ALL FIELOS	223,854	206,750	100	17,104	100				
CHEMISTRY	63,053	58.849	28	4,204	25				
EARTH SCIENCES	17,907	17,390	8	517	1 3				
METEOROLOGY	5,510	5,424	3	86	1 1				
PHYSICS	26,698	25,842	12	856	]				
MATHEMATICS	17,411	15.664	8	1,747	10				
AGRICULTURAL SCIENCES	9,526	9,475	5	51					
BIOLOGICAL SCIENCES	27,135	24,028	12	3,107	18				
PSYCHOLOGY - ~	16,804	13,057	6	3,747	22				
STATISTICS	2,843	2,554	1	289	2				
ECONORICS	12,143	11.650	6	493					
SOCIOLOGY	2,703	2,296	1	407	3 2				
LINGUISTICS	1,351	1,090	i	261	2				
OTHER FIELDS	20,770	19,431	9	1,339	8				
	-			ı	l .				

NOTE - PERCENTS MAY NOT AGO TO TOTAL BECAUSE OF ROUNDING.

TABLE 42.-NUMBER OF WOMEN SCIENTISTS, BY FIELD AND HIGHEST DEGREE, 1964

			HIGHEST	OEGREE		LESS SHAN	NE) REPORT
SCIENTIFIC AND TECHNICAL FIELD	TOTAL	PH•0•	PROFESSIONAL MEDICAL	MASTER*S	BACHELOR*S	BACHELOR'S OEGREL	
ALL FIELDS	17.104	5,458	265	6,526	4,661	74	120
CHENISTRY	4 • 204 517	976 99	22	1,041	2.111 206	21 5	33 5
METEOROLOGY	86 856	11 212	1	28 334	37 299	6 2	8
MATHEMATICS	1,747 51	266 7		954 12	492 28	16	19
BIOLOGICAL SCIENCES	3,107 3,747	1,235	237.	971 1,803	650 94		15 10
STATISTICS	289 493	55 195		126 228	93 61	4	5
SOCIOLOGY	407 261	272 104 190	3	116 115 596	14 33 543	1	1

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE 43.-HUMBER OF WOMEN SCIENTISTS, BY FIELD AND TYPE OF EMPLOYER, 1964

		TYPE OF EMPLOYER									
SCIENTIFIC AND TECHNICAL FIELD		EDUCA- TIONAL INSTI- TUTIONS	FEOERAL GOVERN- HEN!	OTHER GOVERN- MENT	MILITARY		ANO	SELF- EMPLOYEO	OTHER	EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
ALL FIELOS	17,104	8, 378	1,347	858	50	1.110	2,241	4,69	209	2.308	134
CHENISTRY	4,204	1.485	397	88	10	253	1,102	35	18	790	26
EARTH SCIENCES	517	210	65	23	3	16	56	18		111	7
METEOROLOGY	86	22	30	2	13	4	7				
PHYSICS	856	419	90	2	2	32	123	8	1	173	
MATHERATICS	1,747	940	127	24	1	59	354	10	13	207	12
AGRICULTURAL SCIENCES	51	16	9	9		1	6	1			1
BIOLOGICAL SCIENCES	3.107	2.075	223	120	15	192	124	28	30		24
PSYCHOLOGY	3,747	1,733	159	492	6	396	89	336	99		39
STATISTICS	289	68	76	29		24	54	1		23	1 4
ECONOMICS	493	222	87	24		18	50	•	13	64	
SOCIOLOGY	407	284	22	21		27	1 :	'	2	38	! 4
LINGUISTICS	261 1,339	157 747	10 52	20		28	285	16	14	51 161	1

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

TABLE 44.—HUMBER OF WOMEN SCIENTISTS, BY FIELD AND WORK ACTIVITY, 1964

		WORK ACTIVITY									NO
SCIENTIFIC AND TECHNICAL FIELO	TOTAL	RESEARCH AND DEVELOPMENT			MANAGEMENT OR AGMINISTRATION		TEACHING	PRODUCTION AND	OTHER	NOT EMPLOYEO	REPORT OF WORK ACTIVITY
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	0F R+0		INSPECTION	UIMER		
ALL FIELDS	17,106	5,279	2,862	2,130	1,065	483	4,897	612	2,416	2+308	527
HEHISTRY	4,204	1,671	1,244	554	160	37	634	396	255		98
ARTH SCIENCES	517	100	70	29	25	11	130	5	120	111	26
IETEOROLOGY	86	37	23	14	5	2	4		30	8	2
HYSICS	855	340	215	100	26	17	263	4	36	173	14
IATHEMATICS	1,747	407	90	136	98	55	790	33	111		51
GRICULTURAL SCIENCES	51	16	5	9	4	1	4	10	8	8	1
SIOLOGICAL SCIENCES	3,107	1.055	806	246	176	96	1,290	37	182		91
SYCHOLOGY	3,747	987	216	760	310	99			1,281	398	135
TATISTICS	289	116	24	72	42	21	30	35	29	23	14
CONOMICS	493	112	48	63	73	41		19	46	64	22
COCTOLOGY	407	111	70	41	41	26		į	20	38	17
.INGUISTICS )THER FIELDS	261 1,339	43 84	22 23	21	14	25		21	20 278	51 161	14

<sup>(</sup>A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

#### TABLE 45.--NUMBER OF WOMEN SCIENTISTS, BY FIELD AND YEARS OF PROFESSIONAL EXPERIENCE, 1964

		YEARS OF PROFESSIONAL EXPERIENCE							
SCIENTIFIC AND TECHNICAL FIELD	TOTAL	1 YEAR.	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	25 OR MORE YEARS	NO REPORT OF YEARS OF EXPERIENCE	
ALL FIELDS	:7,104	785	3,213	1,439	2,456	1,86%	4,153	1,192	
:HEMISTRY	4,204	422	1.046	766	498	791	685	396	
ARTH SCIENCES	517	33	86	85	69	44	122	78	
1ETEOROLO.;y	86	3	27	19	15	11	2.6	5	
PHYSICS	856	59	231	186	109	73	152	46	
IATHEMATICS	1,747	16	344	495	249	169	421	50	
IGRICULTURAL SCIENCES	51	3	9	11	3	7	17	1	
BIOLOGICAL SCILNCES	3,107	89	504	512	468	356	984	194	
*\$YCHOLOGY	3,747	74	206	767	640	467	1,020	270	
STATISTICS	289	3	50	64	44	48	73	į 7	
CONOMICS	493	17	67	76	55	50	181	47	
80C10F06A	407	3	43	92	90	56	101	22	
.INGUISTICS	261	13	52	64	38	31	41	22	
)THER FIELOS	1,339	50	255	299	17%	163	340	54	

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

#### TABLE 46.-NUMBER OF SCIENTISTS, BY FIELD AND PROFESSIONAL IDENTIFICATION, 1964

				PROFES	STOMAL ID	ENTIFICATION	1		
SCIENTIFIC AND TECHNICAL FIELD	TOTAL	ASTRONOMER	BIOLOGIST	MEDICAL SCIENTIST	CHEMIST	ECONOMIST	ENGINEER	GEOLOGIST	LINGUIS
ALL FIELDS	223, 854	686	23+047	8+053	56,173	9,106	291656	13,602	1,230
CHEMISTRY	63,053	1	1.422	936	50,293	25	8,718	47	
EARTH SCIENCES	17,907	5	253	1	220	19	985	13,039	1
METEOROLOGY	5,510	12	10		69	1	134	6	
PHYSICS	26, 698	645	27	27	1,377	2	3,296	25	7
MATHEMATICS	17,411	11	16	10	61	119	1,956	10	12
AGRICULTURAL SCIENZES  — — — —	9,526	2	5.543		215	51	137	27	
BIOLOGICAL SCIENCES	27, 135	2	15.035	6,948	709	3	71	6	
PSYCHOLOGY	16,804		46	56	52	15	49	4	6
STATISTICS +	2,843		7	6	49	67	187	6	
ECONOMICS +	12,143		18	2	1,006	8,657	1,142	36	2
SCCTOLOGY	2.703		4		3	30	9	2	i i
LINGUISTICS	1,351				6		8	l ī	1,152
OTHER F3ELOS	20.770	8	666	51	2,113	117	12,964	393	49

		PR	OFESSIONAL	10ENTIFICATION				NO REPORT
SCIENTIFIC AND TECHNICAL FIELD	MATHEMATICIAN	METEOROLOGIST	PHYSICIST	PSYCHOLOGIST	SOCIOLOGIST	STATIS- TICIAN	OTHER	OF PROFESSIONAL IDENTIFICATION
ALL FIELOS	13,450	4,961	22,117	15,683	2,809	3,149	11,493	<b>8,</b> 639
CHEMISTRY	11	5	240	5		5	760	585
EARTH SCIENCES	53	92	386	1		4	1,643	1,205
METEOROLOGY	11	4,736	378			4	105	44
PHYSICS	338	23	19,651	10		4	1,114	152
MATHEMATICS	11,914	44	503	67	2	735	1,543	408
AGRICULTURAL SCIENCES	3		17	3		13	1,131	2,368
BIOLOGICAL SCIENCES	13	2	271	65	4	21	1,280	2,705
PSYCHOLOGY	36	8	10	15, 197	358	36	458	473
STATISTICS	267	2	13	154	11	1.935	107	32
ECONOMICS	96	10	18	23	17	274	634	208
SOCIOLOGY	4		3	27	2,349	56	168	39
LINGUISTICS	8		1	27	4	1	96	47
OTHER FIELDS	696	31	626	104	64	61	2,454	373

						HAJOR SUB	JECT					
SCIENTIFIC AND TECHNICAL FIELD	YUTAL	CHEAI STRY	AGRICULTURE AND FOUD CHEMISTRY		PHYS? CAL CHEMISTRY	GEOLOGY	GEOG- RAPHY	GEO- PKYSICS	OCEANDG- Raphy	METEOR- OLOGY	PHYSICS	ASTRON- OMY
ALL FIELOS	223,854	46, 927	593	4,248	4,116	13,684	1,655	561	189	2,158	24,090	579
HEHISTRY	63,053	40,787	409	3,462	3,229	132	2	1	5	8	307	1
ARTH SCIENCES	17,907	236	2	3	12	12,610	1,341	428	147	76	364	1 3
IETEUROLOGY	5,510	212	3	2	11	56	88	35	9	1,926	519	21
PHYSICS	26,698	1,365	1	i 6	577	76	1	39	2	30	19,351	510
MATHEMATICS	17,411	163		5	35	55	5	9	2	57	1,218	22
IGRICULTURAL SCIENCES	90526		47	16	2	27	6		3		6	
BIOLOGICAL SCIENCES  — ~ -	27,135		107	649	29	23	7	1	19		318	l
SYCHOLOGY	15,804			2	3	5				1	30	1 1
TATISTICS	2,843		] 2	4	3	10	3	2		اِ اِ	51	l î
CONDMICS	12,143		j 6	16	34	53	68			1 6	54	
GCI01.0GY	2•703		i	] 1	1	2	j 3		******		i	
INGUISTICS	1.351					2			i		1 7	
)THER FIELDS	20,770	2,454	16	82	180	633	134	46	3	52	1,804	19

SCIENTIFIC AND						HA.	JOR SUBJI	ECT						NO REPORT
TECHNICAL FIELD	MATHE- MATICS	AGRI- CULTURE		8 101.0GY	BIO- PHYSICS	CHOLOGY PSY-	SOCIAL PSY- CHOLOGY	STA- TIST;CS	NOHEC S	OFOEA	LIN- GUISTICS		OTHER	70
ALL FIELOS	15,708	5,502	4,275	26,461	286	15,511	313	1,623	10,615	2,786	1,109	26,456	7,903	6,506
CHEMISTRY EARTH SCIENCES	136 181	246 82	11 29	2,242 233		26	==	15	319 68	3	6	9-265 1,359	341	
METEOROLOGY	429	49	15	49		21		2	71	11		296	305 427	1,258
PHYSICS — — — — — — — — Mathematics — — — — — —	821 11,835	16	9	88 76	42	75 146		462	50 576	23	7 31	2,594	727 811	321 454
AGRICULTURAL SCIENCES	7	4,032	3,808	1,165		3		6	75	1		67	123	90
BIOLOGICAL SCIENCES	47	942	251	21,708	200	134		4	34	18	7	81	790	1 .
PSYCHOLOGY	42 695	33	2	118		14,633		30	54	606	11	42	981	
ECONOMICS	231	22 48	63	45 41		203 44	9	899 123	397	36 39	3	157	127	•
SOCIOLOCY	22	3	"1	19		42	30	11	8,439 68	2.160		1,027 11	468 285	
LINGUISTICS	20		2	3		29	4	1	3	3	985		249	
OTHER FIELDS	1,242	53	74	674	4	149	3	58	461	76	48	10.172	2.769	

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1944

#### TABLE 48.-NUMBER OF SCIENTISTS, BY FIELD AND FIELD OF EMPLOYMENT, 1964

				FIELO OF	ENPLOYME	NT		
SCIFNTIFIC AND TECHNICAL FIELD	TOTAL	CHEMISTRY	EARTH SCIENCES	HETEOROLOGY	PHYSICS	HATHEKATICS	AGRICULTURAL SCIENCES	BIGLOGICAL SCIENCES
ALL FIELOS	- 223,854	53,777	15+292	5,174	23,363	15,950	31044	24,715
HEXISTRY	63,053	51,024	73	42	500	68	39	701
AATH SCIENCES	17,907	79	14,636	47	35	47	39	701 54
ETEOROLOGY	5,510	16	113	4,816	72	41	3.	7
HYSICS	7 25,698	436	91	151	21 - 774	348	1	206
GRICULTURAL SCIENCES+	17,411	30	24	27	266	14,418	ż	27
IOLOGICAL SCIENCES	9,526	101	32	8	7	7	8,443	325
SACHOFORA 2015MCE2	27,135	713	60	18	63	40	455	23,251
TATISTICS	16,804	16	3	3	9	71	i	81
CONGNICS	2,843	25	3	2	ಕ	292	2	4
DC10LOGY	12,143	270	15	2	19	129	22	6
INGUISTICS	2,703	2	1			11		4
THER FIELDS	1.351	6	1		2	7		
<del></del>	20,770	1,050	240	58	558	471	35	149

		F	IELD OF EMP	LGYMENT			NO REPORT O
SCIENTIFIC AND TECHNICAL FIELD	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	1 INGUISTICS	OTHER FIELDS	FIELD OF EMPLOYMENT
ALL FIELDS	15,479	2:501	11,959	2,686	1,183	25.930	16,801
CHEMISTRY	- 47	48	942	3	4	4,726	4,831
EARTH SCIENCES	12	9	119	7	3	861	1,909
METEOROLOGY	1 .		19		1 1	137	282
MATHEMATICS	26	9	73	1 1		1,635	2.037
AGRICULTURAL SCIENCES	31	177	205 68	9	10	1.022	1,164
BIOLOGICAL SCIENCES	- 54	10	30	14		701	383 1,731
PSYCHOLOGY	15,016	64	39	179	20	180	1,122
STATISTICS	95	2,031	115	12	ľ	107	146
ECONOMICS	17	83	9,927	18	1 2	273	1,360
SOCIOLOGY	- 60	10	29	2,374	3	69	140
LINGUISTICS	18	2	l i	2	1,105	43	164
OTHER SIELOS	- 88	53	392	60	25	16-050	1,532

# APPENDIX A Detailed Statistical Tables



## List of Detailed Statistical Tables

A 1	Mr. b. d. t. t. a. a. a. a. a.
W-1	Number of scientists, by field, age, and highest degree, 1964
A-2	. Number of scientists, by field, employment status, and highest degree, 1964
A-3	Number of scientists, by field, type of employer, and highest degree, 1964
A-4	Number of scientists, by field, work activity, and highest degree, 1964
A-5	Number of scientists, by field, years of professional experience, and highest degree,
<b>A-</b> 6	Number of scientists, by field, age, and type of employer, 1964
A-7	Number of scientists, by field, work activity, and type of employer, 1964
<b>A-</b> -8.	Number of scientists, by field, years of professional experience, and type of employer,
	Number of university and college teachers, by field, highest degree, and academic rank, 1964
A-10.	Number of scientists, by field, age, and work activity, 1964
A—11.	Number of scientists, by field, years of professional experience, and work activity, 1964
A—12.	Median annual salaries of full-time employed civilian scientists, by field, highest degree, and type of employer, 1964
	Median annual salaries of full-time employed civilian scientists, by field, age, and type of employer, 1964
	Median annual salaries of full-time employed civilian scientists, by field, work activity, and type of employer, 1964
	Median annual salaries of full-time employed civilian scientists, by field, years of professional experience, and type of employer, 1964
	Median annual salaries of university and college teachers, by field, salary base, and academic rank, 1964
A—17.	Number of scientists, by State and field. 1984
A—18.	Number of scientists, by State and highest degree, 1964
A—19.	Number of scientists, by State and type of employer, 1964
A-20.	Number of scientists, by State and work activity, 1964
A-21.	Median annual salaries of full-time employed civilian scientists, by State and field, 1964
A-22.	Median annual salaries of full-time employed civilian scientists, by State and highest degree, 1964
A <b>2</b> 3.	Median annual salaries of full-time employed civilian scientists, by State and type of employer, 1964.
A-24.	Median annual salaries of full-time employed civilian scientists, by State and work activity, 1964.
A-25. A-26.	Number of scientists, by Standard Metropolitan Statistical Area and field, 1964
<b>1–2</b> 7.	Number of scientists, by Standard Metropolitan Statistical Area and type of eraployer,
<b>1–2</b> 8.	Number of scientists, by Standard Metropolitan Statistical Area and work activity, 1964.
<b>1–2</b> 9.	Median annual salaries of full-time employed civilian scientists, by Standard Metropolitan Statistical Area and field, 1964
<b>1–3</b> 0.	Median annual salaries of full-time employed civilian scientists, by Staudard Metropolitan Statistical Area and highest degree, 1964
<b>1-3</b> 1.	Median annual salaries of full-time employed civilian scientists, by Standard Metropolitan Statistical Area and type of employer, 1964
<b>-3</b> 2.	Median annual salaries of full-time employed civitian scientists, by Standard Metropolitan Statistical Area and work activity, 1964
<b>\-3</b> 3.	Number of scientists, by foreign language and field, 1964
-34	Number of scientists, by foreign language and proficiencies, 1964.
<b>-3</b> 5.	Number of scientists, by foreign language and pronciencies, 1964
-36	Number of scientists, by subfield and highest dames, 1964
_ <b>37</b>	Number of scientists, by subfield and highest degree, 1964
_38	Number of scientists, by subfield and age, 1964
_30	Number of scientists, by subfield and type of employer, 1964.
. 20.	Number of scientists, by subfield and work activity, 1964
_ <u>41</u>	Number of scientists, by subfield and years of professional experience, 1964
. "	Number of scientists receiving Federal support, by field, highest degree, and program, 1964.



88

A-42.	Number of scientists receiving Federal support, by field, type of employer, and program, 1964
A-43.	Number of scientists receiving Federal support, by field, work activity, and program, 1964.
A-44.	Number of scientists, full-time professionally employed, part-time student, by field and highest degree, 1964
A-45.	Number of scientists, full-time professionally employed, part-time students, by field and type of employer, 1964.
A-46.	Number of scientists, full-time professionally employed, part-time student, by field and work activity, 1964
A-47.	First and second work activity of scientists employed at universities and colleges, by field, 1964
Å-48.	First and second work activity of scientists employed at universities and colleges, by highest degree, 1964
A-49.	Number of university and college teachers, by State and field, 1964
A-50.	Number of university and college teachers, by State and academic rank, 1964



ERIC.

SCIENTIFIC AND TECHNICAL FIELD AND ACE   1071AL   1970AL   1970A		<u> </u>	<u> </u>					
SCIENTIFIC AND RECINICAL FIELD AND AGE   1707AL   PH.D.   PROFESSIONAL   MASTER'S   BACHELOR'S   DE GEGRE   PROFESSIONAL   P				HIGHEST	OEGREE		LESS THAN	NG REPORT
	SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	PH.D.		MASTER'S	BACHELOR*S		
22-29	ALL FIELDS	223,854	79,372	5,925	61.222	72,364	2,878	2,093
30-34								
32-39								
### ### ### ### ### ### ### ### ### ##	35-39						1	1
10-921   10-921   10-921   10-921   10-921   10-925   1	· · · · ·	35 - 831						
11.208						1	L	236
60-44				_				
1,700   1,70							1	
CHEMISTRY		3-428	1,759	124	715			
25-59								
25-29	CHEMISTRY	63,053	21.789	368	12,229	27,377	590	700
25-26   10.352 2.160   35 2.389   57.717   21 33 33 53-59   10.352 2.389   57.717   21 33 34 65 65 64 64 4   10.357 7.176   10.357 7.176   10.357 7.177   72 1.1891   3.747   90 110 110 107							6	17
35-39								
### ### ### ### ### ### ### ### ### ##								
45-49 - 7, 229 2, 798 40 1,404 7.845 100 107 45-60 - 1,416 1,753 18 9.84 1.990 128 162 60-64	40-44							
95-59 0-64 0-64 1,1870 862 7 316 597 340 60-64 1,1870 862 7 316 597 340 598 60-80 171 181 182 171 181 182 171 181 182 171 181 182 171 181 182 171 181 182 171 181 182 171 181 182 171 181 182 171 181 182 171 181 182 171 181 182 171 181 182 171 181 181 181 181 181 181 181 181 181	15 15	7,29%	2,798	40	1,404	2,845	100	107
Co-6-6								
05-69   943   443   7   155   293   25   20   20   20   20   20   20   20								
### SCIENCES   17,907   3,576   1   5,629   8,101   254   144		943	443		155	293	25	20
20-24							13	13
25-29	EARTH SCIENCES	17,907	3,578	1	5,829	8,101	254	144
30-34   35-39   37-52   665   11-445   11-179   4   4   4   4   4   4   4   4   4				l .				
35-39								
40-44 -	35-39							
1,206   327   294   522   45   18   65-59   876   259   200   356   41   20   66-64   532   171   114   217   15   15   15   15   15   15   15				1	877	1,540	36	25
\$75-59		1 -						
Second   S	55-59			į				
TO AND OVER		532					15	15
NO REPORT	65-69			· ·				
118	NO REPORT		,	1				
12-22   133	METEOROLOGY	5,510	479		1,137	2,524	1,147	223
25-29	20-24	118			13	93		3
15-9   15-6   12-7   15-6   12-7   15-6   12-7   15-6   12-7   15-6   12-7   15-6   12-7   15-6   12-7   15-6   12-7   15-6   12-7   15-6   12-7   15-6   12-7   15-6   12-7   15-6   12-7   15-7	25-29	1	22			1		
\$\frac{4}{65-69} - \frac{1}{166} \frac{123}{123} \rightarrow \frac{256}{405} \frac{405}{33} \frac{207}{50} \frac{50}{50} \frac{46}{50} \rightarrow \frac{7}{10} \rightarrow \frac{133}{30} \frac{207}{50} \frac{50}{50} \frac{50}{50} \rightarrow \frac{13}{50} \rightarrow \frac{62}{62} \rightarrow \frac{8}{62} \rightarrow \frac{10}{62} \rightarrow \frac{10}{6							i .	
Section	3	_			1		1	1
10   10   10   10   10   10   10   10	45-49	1 -						
Control   Cont		4						
Color	55-59					III.	(	
NO REPORT	65-69	1	1		1		1	! 4
PHYSICS	70 AND OVER	L.	1		2	1	5	2
20-24								=
25-29 6,686		}	╁		<del> </del>	<del> </del>		<del> </del>
30-34	25-29	6-686		1			4	
1,846	30-34	5,730	2,484	_	1,738	1.452	27	23
45-49							1	
SO-54     1,191   581     357   220   20   13   17   56-69     604   352     148   82   9   13   65-69     604   352     148   82   9   13   65-69     604   352     148   82   9   13   65-69     604   352     15   5     17   14     3   17   14     3   17   14     3   17   14     3   17   14     3   17   14     3   17   14     3   17   14     3   17   14     17   11   4   603   5   7,464   4,917   210   212   20-24     343   11     193   127   8   4   25-29     3,703   577     1,837   1,215   455   31   30-34     3,439   942   1   1,798   1,453   54   50   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   942   1   1,391   1,023   36   46   40-44     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3,439   38     3	45-49							
60-64	50-54	1,191	581		357	220	20	13
65-6 /		1		11				
TO AND OVER	65-6 /			2			4	
### ##################################	TO AND OVER		1			14		3
20-24		<u> </u>	<u> </u>		<del> </del>	<del> </del> -	310	21.2
25-29	20-24	<del> </del>	<del> </del>	7	+	<del> </del> -		<del> </del>
35-39	25-29	3.703	577		1,837	1,215	45	31
40-44	30-34		1	I .				1
45-49	40-44			1				
55-59 601 264 232 80 11 14 60-64 135 166 131 57 4 1 65-69 165 89 56 33 56 33 2	45-49	1.301	478	3	528	267	11	14
60-64	50-54	1	1					L
65-69	60-64	1					1 4	
70 ANO OVER	45-49	165	89	1	56	16	2	3
no neron:	70 ANO OVER	1	33					2
	NO NOT VICE	L	<u> </u>		<del></del>	<del></del>	<del></del>	<del></del>

			HIGHEST	DEGREE			
SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	PH.D.	PROFESSIC NAL MEDICAL	MASTER'S	BACHELOR*S	LESS THAN BACHELOR'S DEGREE	NO REPORT OF DEGREE
AGRICULTURAL SCIENCES	9,526	2,367	11	2,676	4,362	63	47
20-24	133 1,279 1,700 1,574 1,571 1,241 874 590 280 133 55	58 344 392 530 470 248 180 99 58 28	1 1 2 3 3 2	20 410 543 452 428 312 209 149 83 44, 15	111 804 798 717 643 492 400 246 86 28 12	2 3 1 5 9 7 13 12 9	3 13 6 8 8 4 2 2
610LOGICAL SCTENCES	27 • 135	13,355	5,408	5,028	3,172	71	101
25-29	351 2 + 800 4 + 513 5 + 347 4 + 514 3 + 332 2 + 436 1 + 827 1 + 166 531 247 77	539 2,021 2,991 2,499 1,856 1,312 1,027 642 317 158 23	2 240 857 1,127 1,080 748 558 380 257 113 44 2	65 1,140 1,077 828 529 435 355 255 170 64 22 28	282 876 545 438 319 263 182 143 77 33 20 24	1 2 4 6 16 18 14 5 2	1 4 11 19 21 14 11 8 9 2
2C-24	16,804	10,843	52	5,464	417	4	24
75-29 30-34 	35 1,220 2,838 3,739 3,299 2,047 1,493 984 589 290 237	2 460 1,736 2,500 2,500 1,442 1,022 633 397 204 178 19	3 7 11 9 6 7 4 6	25 683 1.016 1.158 967 559 4.22 320 177 75	8 74 75 68 70 35 38 26 11 6	2	4 2 1 5 2 1
STATISTICS	2,843	804	3	1,133	810	43	======================================
20-24	22 377 572 543 462 379 228 151 80 16	1 52 160 158 155 121 64 48 33 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13 218 249 219 157 129 76 44 22 4	3 102 155 148 133 113 77 45 19 6	3 1 6 8 5 6 9 5	2 6 32 9 10 4 5
ECONOMICS	12,143	5,091	2	4,204	2,613	90	143
20-24	1/8 1,130 1,905 1,934 2,151 1,650 1,210 835 538 353 238 21	188 686 794 1.041 791 558 371 286 203 156	1 1	93 656 834 636 615 438 360 256 122 85 41 8	97 269 372 433 461 418 251 178 99 49 34	1 1 7 6 12 17 21 9 10	1 6 11 14 21 16 20 21 21 7 5
20-24	2,703	2,179	3	434	65	3	T3
25-29	6 92 355 513 517 414 311 191 144 85 73 2	1 62 279 400 424 352 247 155 123 68 66 2	2 1 2 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	1 21 67 101 80 52 48 30 17 12 5	4 6 7 9 9 6 13 4 2 3 2	2	2 2 3 1 2 2

TABLE A-1.-NUMBER OF SCIENTISTS, BY FIELD, AGE, AND HIGHEST DEGREE, 1964 - CONTINUED

SCIENTIFIC AND RECONSTRUCT			HIGHEST	OEGREE		LECS THAN	NO REPUS!
SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	₽Н.О.	PROFESS:ONAL MEDICAL	MASTER'S	BACHELOR'S	8ACHFLOR'S	OF DEGREE
LINGUISTICS	1,351	729	2	407	162	1	50
20-24	26			10	14		,
25-29	162	28		93	40		1 1
35-39	239	89		107	46		1 4
40-44	274	155		86	27		6
45-49	215	139	2	50	18		6
50-54	132	92		26	5	**-***	6
65-59	120 92	87		14	7		12
60-63	52	66 43		15	5	1	5
65-69	20	15		2	3	~~~~~	2
70 AND OYER	13	12					3
NG REPORT	6	4			2		
OTHER FIELDS	20,770	3,269	34	6,865	10,171	217	214
20-24	998	3		169	818		
25-29	3,480	195	1	1,151	2,118	7	1
10-34 ~	3,298	412	i	1,162	1.669	21	33
)5-39	3,375	567	i i	1,328	1,423	24	32
60-44	3,321	635	ŝ	1,151	1.463	39	28
45-49	2.336	443	6	692	1,138	35	22
50-54	1,663	367	Ġ	543	685	30	37
55-59	1,074	275	9	345	397	28	19
60-64	688	210	3	193	246	15	Ží
65-69	311	94	1	85	118	6	7
70 AND OVER	194	66	ı	35	81	4	6
NO REPORT	27	1 1		10	15		I

	J. FAELU	· EMPLOYME	ENT STATUS, AN	D HIGHEST	EGREE, 1964		
SCIENTIFIC AND TECHNICAL FIELD AND EMPLOYMENT STATUS			HIGHEST				Τ
	TOTAL	PH.O.	PROFESSIONAL MEDICAL	MASTER + S	BACHELOR'S	BACHELOR'S DEGREE	NO REPORT OF DEGREE
ALL FIELDS	223,854	79,372	5,925	61,222	72,364	3 0 10	
FULL-TIME EMPLOYED	193,943	75,275	5,562	<del> </del> -		2,878	2,093
MILITARY	189,350	74,674	5.094	48,853 47,642	59, 838 58, 282	2,591	1,819
PART -11ME EMPLOYED	4,593 3,560	1,352	468	1,216	1,556	1,955	1,703
PARITIME EMPINYER = = = = =	18,039	763	172 136	1,171	791	34	116 40
401 SWAFDAEO	13,397	513	95	8,952 6,752	8,051 5,963	53	84
EMPLOYED BUT NOT PROFESSIONAL WORK NOT EMPLOYED	4,642 2,933	250 334	41	2,200	2,088	22 31	52
NO REPORT	4,975	1,531	10 20	761	1,675	93	32 40
<del>-</del> -	404	117	25	1,355 125	1,898	97	74
CHEMISTRY	63,053	21 700			91	10	36
FULL-TIME EMPLOYED	54,218	21,789	368	12,229	27, 377	590	700
CIVILIAY	53,831	20,607	339	9,914	22,195	536	627
	387	109	303 36	9,810 104	22,057	536	627
31005EU12	631	260	6	127	138 223		
PART-TIMS CMPLOYED	5,539 4,188	310 218	18	1,690	3,498	6	.9
CONFLOTED SOL NUL PROFESSIONAL MODE	1,351	92	10	1,294	2,652	ź	18 12
101 CHIELDES D = = = = = = = = = = = = = = = = = =	763	86	1	396 117	846 540	3	6
10 KEPORT	1,817	500   26	2	369	892	12 29	10
EARTH SCIENCES		20	2	10	29	ž	25 11
<b> </b>	17,907	3,578	1	5,829	8,101	254	
FULL-TIME EMPLOYED	14,987	3,356	1	( (02	<del>i</del>		144
Miliaxy	14,866	3,347	i	4,693	6,624	198	115
' 'N   T   IME EMPI   IMEN = = = = = = = = = = = = = = = = = = =	121 368	9		60	5,577 47	194	114
PART-TIME EMPLOYED	1,691	58   54		113	176	13	1 6
101 (41/1012)	1,211	29		802 608	800	21	14
CAPTOTE BUT NUL PROFESSIONAL MODE	480   357	25		194	556 244	12	9
NOT EMPLOYED	482	19 † 90 ¦		88	240	7	5 3
	22	1;		124	251	13	4
METEGRULOGY	5,510	479	====		10		2
FULL-TIME EMPLOYED				1,137	2,524	1,147	223
CIVILIAN	5,015 2,962	467 453		992	2,303	1,050	202
' '''   I'ME EMPLUYED = = = = .	2,053	14		630	1,355	429	203 95
3.00E/413	32	7		362	948 11	621	108
PART-TIME CMPLOYED	217 168	1 1		98	103	13	1
FIREQUED DOL NIII PRIEECCIAVAL MONO	49			84	79	2	2 2
101 ENFLUYED	151	1		14 24	24	11	
NU REPORT	91	2		13	73 32	45 35	8
PHYSICS		1		1	2		<del>:</del>
FULL-TIME EMPLOYED	26,698	10,286	30	8,352	7,673	185	172
CIVILIAN	21,431	9,982	26	5,764	F 227		112
MILITARY	21,057 374	9,920	23	5,591	5,337 5,206	178 175	14+
PART-TIME FMPLOYED	220	62   90	3	173	131	3	1·2 2
PART-TIME EMPLOYED	4,504	96	4	2,324	45		4
NOT EMPLOYED	3,501	69	4	1,825	2,060 1,591	2	1.6
GMPLOYED BUT NOT PROFESSIONAL WORK	1,003	27	*******	499	469	1	1. 7
NO REPORT	347	91		53 120	91	4	2
	24	5		10	134	1	1
							3

ر از از این از در این

ERIC Full fact Provided by ERIC

TABLE A-2.-NUMBER OF SCIENTISTS. BY FIELD: EMPLOYMENT STATUS, AND HIGHEST DEGREE. 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD			HIGHEST	DEGREE		LESS THAN	NO REPORT
AND EMPLOYMENT STATUS	TOTAL	PH•D•	PROFESSIONAL MEDICAL	MASTER S	BACHELOR*S	BACHELOR®S DEGREE	OF DEGREE
MATHEMATICS	17+411	4,603	5	7,464	4,917	210	212
FULL-TIME "MPLOYEO	15,530 15,293 237 207 1,231	4,380 4,358 22 48 107	4 1	6,244 6,083 161 98 931	4;511 4,461 50 55 185	197 194 3 3	194 193 1 2
NOT EMPLOYED	946 205 125 277 41	74 33 23 38 7		735 196 40 127 24	132 53 55 105 6	4 1 2	3 3 5 2
AGRICULTURAL SCIENCES	9,526	2+367	11	2,676	4+362	63	47
FULL-TIME EMPLOYEO	8+755 8+742 13 92 447	2+289 2+289  21 6	10 10  1	2,309 2,304 5 29 276	4,046 4,038 8 41 160	60 60	1 3
NOT EMPLOYED	369 78 135 82 15	5 1 10 38 3	1 	230 46 44 16 2	132 28 79 28 8	1 1 1	11
BIOLOGICAL SCIENCES	27,135	13,355	5+408	5,028	3:172	71	101
FULL-TIME EMPLOYEO	24,119 23,357 762 512 1,914 1,439 475 146 364 80	12,802 12,565 237 227 82 58 24 30 183 31	5+091 4+670 421 160 110 77 33 8 16	3.704 3.630 74 79 1.081 824 257 49 99	2,369 2,341 28 43 636 477 159 54 64 6	63 63 1 1 4 1 2	90 88 2 2 5 3 2 1 1
PSYCHOLOGY	16,804	10+843	52	5+464	417	4	24
FULL-7IME EMPLOYEO CIVILIAN	14,751 14,557 194 807 580 417 163 131 495	10,098 9,999 99 399 35 21 14 43 248 20	45 43 2 5 2 2 	4,284 4,196 88 382 437 354 133 71 223	303 300 3 19 56 40 16 16 21	3 1 2  1	18 18 
STATISTICS	2,843	804	3	1,133	810	43	50
FULL-TIME EMPLOYED	2+581 2+556 25 41 144 114 30 35 36 6	778 7773 5 14 3 2 1 4 4	3 2 1 	968 951 17 20 119 95 24 11 14	749 747 2 7 19 16 3 13	41 41    2	42 42  3 1 2 2 2 1 2

ERIC Full Text Provided by ERIC

TABLE A-2.-NUMBER OF SCIENTISTS, BY FIELD, EMPLOYMENT STATUS, AND HIGHEST DEGREE, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD			HIGHEST	DEGREE		LESS THAN	NO REPOR
AND EMPLOYMENT STATUS	TOTAL	PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S	BACHELOR'S DEGREE	OF DEGRE
ECONOMICS	12,143	5,091	2	4,204	2,613	90	143
ULL-TIME EMPLOYED	10.546	4,753	2	3,368	2,242	71	110
CIVILIAN	10.5C2	4.741	2	3,346	2,233	71	109
MILITARY	44	12		22	9		i
TUDENTS	223	55		69	35	į ž	9
PART-TIME EMPLOYED	364	17		473	42	1	6
NOT EMPLOYED	175	9		323 150	27	1	5
IPLOYED BUT NOT PROFESSIONAL WORK	450	55		159	15 222	8	1 6
OT EMPLOYED	335	167		89	67	8	6
) REPURT	50	11		26	5	2	6
SOCIOLOGY	2,703	2,179	9	434	65	3	13
JLL-TIME EMPLOYED	2,469	2,023	9	366	58	1	12
CIVILIAN	2,459	2,016	i	365	57	l i	12
MILITARY	10	7	l i	i	i		
RT-TIME EMPLOYED	10:	71		29	i		
UDENTS	31	9		19	2	1	
PART-TIME EMPLOYED	15	1		12	1	1	
IPLOYED BUT NOT PROFESSIONAL WORK	1 16	8		7	1		
OT EMPLOYED	15	9		4	2	1	
O REPORT	7 %	61 6		16	2	1	1
LINGUISTICS	1,351	729	2	407	162	<u> </u>	50
JLL-TIME EMPLOYED	1,086	682	1	2(2			<del></del>
CIVILIAN	1.085	682	i	262 262	100	1	39
HILITARY	i			202	100	1	39
ART-TIME	38	15		17	5		,
TUDENTS	162	6	1	104	46		5
PART-TIME EMPLOYED	78	3	1	52	18		4
IPLOYED BUT NOT PROFESSIONAL WORK	84	3		52	28		1
IT EMPLOYED	18	6 18		17	5 5		
REPORT	5	2					2
OTHER FIELDS	20,770	3,269	34	6,865	10, 171	217	214
	18,455	2.05=					
CIVILIAN	18.083	3,058 3,033	31 27	5,990	9.000	192	184
MILITARY	372	25	4	5:841 149	8.810 190	189	183
RT-TIME EMPLOYED	288	54		98	136	3	1 3
'UDENTS	1.040	37		548	444	6	5
PART-TIME EMPLOYED	587	24		316	242	3	2
NOT EMPLOYED	453	13		232	202	] 3	3
PLOYED BUT NOT PROFESSIONAL WORK	430	26	1	92	300	7	4
)T EMPLOYED	526	91	2	128	282	8	15
( DEDIDT	- 31	3		9	15	1	3

			HIGHEST				
SCIENTIFIC AND TECHNICAL FIELD AND TYPE OF EMPLOYER	TOTAL	PH.D.	PROFESSIONAL HEOICAL	MasteR'S	8ACHELOR'S	LESS THAN BACHELOR'S OEGREE	NO REPORT OF DEGREE
ALL F1CLOS	223,854	79,372	5;925	61,222	72,364	26878	2,093
EOUCATIONAL INSTITUTIONS	77;727 23;405 7,472 5;522 8;722 8;722 8;4421 4;277 1;434 9;617 1,257	42.112 6.717 1.969 649 4.056 19.979 1.344 516 1.781	2.966 371 248 472 874 347 478 56 61	22,044 6,085 2,637 1,428 2,195 21,489 880 452 3,555 451	106 212 9; 521 2; 484 2; 209 1, 449 40; 233 1; 461 366 3; 986 463	85 510 75 645 75 1,250 79 14 128	288 201 59 119 73 1-123 55 24 106 45
CHEMISTRY	63:053	21,789	368	12,229	27,377	590	700
EOUCATIONAL INSTITUTIONS	13,616 4,004 888 648 1,679 37,859 589 311 3,168	7,389 1,328 210 123 921 10,928 162 99 592 37	216 23 9 36 43 19 20 2	2,627 824 158 132 293 7,184 112 57 765	3,317 1,781 483 357 404 18,708 281 147 1,738	13 23 15 	54 25 13 6 543 12 3 31 13
EARTH SCIENCES	17,907	3,578	1	5,329	8;101	254	144
EDUCATIONAL INSTITUTIONS	4,023 2,325 658 241 215 8,400 821 87 962	1,924 512 110 11 92 742 40 24 115	1	1,343 734 249 88 66 2,768 175 25 318	727 1.034 283 135 45 4.681 567 35 495	11 31 13 5 8 133 25 1 25 2	17 14 3 2 5 76 14 2 9
METEOROLOGY	51510	479		1,137	2,524	1,147	223
EOUCATIONAL INSTITUTIONS	527 1;857 78 2,113 152 594 18 160	204 129 7 14 47 67 2 5		195 323 20 372 67 121 6 2 27	116 1,010 41 990 26 272 4 3 56	7 330 8 627 10 106 5 5 46	5 65 2 110 2 28 1 1
PHYSICS	261698	10,286	30	8,352	7,673	185	172
EOUC ATIONAL INSTITUTIONS	1;011 8;954 166	5.368 819 36 70 569 3.234 52 7	4 1 8 7	3,861 836 25 209 225 2,495 31 9 619	2,316 1,219 28 185 199 3,008 61 8 603 46	22 23 3 8 120 7	35 15 
MATHEMATICS	- 17,411	4,603	5	7,464	4;917	210	212
EDUCATIONAL INSTITUTIONS	828 61935 115	56 21 200 791 27	1 1 2 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	3,365 404 100 174 305 2,675 38 37 323 43	71 283 3\196 53 25 15\$	14 19 5 18 145 	30 11 5 1 20 127 2 5 9
AGRICULTURAL SCIENCES	91526	2,36	7 11	2,676	4,362	63	47
EOUCATIONAL INSTITUTIONS	47 99 1,382	43° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8°	7 2 2 2 2 4 3 4 2 4	945 820 396 14 33 328 47 14 62	2;001 938 32 23 825 107 6	1 17 14 	1 10 

		Т	<del></del>				NUES	
## ACCUSTICAL SCIENCES	SCIENTIFIC AND TECHNICAL EXTLO AND COLO	HIGHEST DEGREE						
FIGURAL CONTINUED   1.00   1		TOTAL	PH.D.	PROFESSIONAL MEDICAL	MASTER*S	BACHELOR S	BACHELOR S	NO REPORT OF DEGREE
		7,1122	13,355	5\$408	5,028	36172	71	101
MILITARY	TEUERAL GOVERNMENT	1 17,015	; 0,		2,946	<del> </del>	<del> </del>	<del> </del>
DECEMBER   1177   675   561   572   581   573   581   575   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   581   582   582   581   582	LIFT 1 WKA	1 17203	380			525	11	В
STATE   1.00	INDUSTRY AND BUSINESS	1;775	676		82	38		
No. REPORT	2ELF-EM7COYFO	2 8 120	1 -,	303	484	509	1	
PSYCHOLOGY	NOT EMPLOYES	202	81	49	39		9	
	_ <del></del>						1	
None of the content		16:804	10,843	52	5,464	417	4	===
MUNICATION   120   150   2   951   53   2   2   1   1   1   1   1   1   1   1	**************************************			_		115		<del></del>
SELF-EMPLOYED   11302   1735   2   100   12   2   3   3   3   2   3   3   3   2   3   3	TILITARY	1,901	882	2				1
STATE   STAT	INDUSTRY AND RUSTNESS	1 6 5 7 4				12	2	
NO SEPONT ELL	OTHER				534	88	i	_
STATISTICS	NUI CAPLUYED		140		127			4
SATISTICOS  COLCATIONAL INSTITUTIONS  FEDERAL COVERNMENT  778  495  778  495  246  227  232  77  50  100000  100000  100000  100000  1000000						• •		
DEFORMENT   158   177   405   177   405   177   405   177		2;843	804	3		<del></del> -	42	
122   75   230   177   107	FEDERAL GOVERNMENT						- 43	
THORICATAL ARISON   130	· UIHEK GOVERNMENT		1 1	*******	230	234	17	_
NOTEMPLOYED   38 8	NUMPRUFII ORGANIZATIONS		5	i i	20		1	1
NOT EMPLOYED	>tlEMPLOYEO	1;055	144				- 1	
## ECHOMPICS   20   38   18   2   2	NOT EMPLOYED			1	- 1	7	;	
COMONICS	NO REPORT				38	- •	2	4 3
EDUCATIONAL INSTITUTIONS FEDERAL GOVERNMENT SELF-EMPLOYED THER GOVERNMENT SELF-EMPLOYED SELF-EMPLOYE	ECONOMICS					4		•
MINERAL CONTRIBUTIONS	EDUCATIONAL INSTITUTIONS	5,061	<del></del>				90 j	143
NODPROFIT DIGENTIZATIONS	U#HEK GOVFRNMSNT	1.274	450				- 1	
SEUL-EMPLOYED   1.00	NUMPROFII DRGANIZATIONS	83				57	-	7
MIT MEPLOYED   2077   35   69   70   0   68   69   70   70   69   69   70   69   69   70   69   69   70   69   69   70   69   69   70   69   69   70   70   70   70   70   70   70   7	INDUSTRY AND RUSINESS		1		191	51	3	1
SOCIOLOGY	U#HEK		41					64
SOCIOLOGY		510	176		_			
EDUCATIONAL INSTITUTIONS	SOCIOLOGY				40		- ,	-
Teleral Government	EDUCATIONAL INSTITUTIONS	<del></del>		9	434	65	3	13
NUNPROFIT ORGANIZATIONS	PEUERAL GOVERNMENT							4
SELF-EMPLOYED	71LIIAKY		57	1				1 2
SELF-EMPLOYED	THOUSIRY AND BUSINESS	160	120	-		7 1		
NO REPORT	OTHER					15		3
LINGUISTICS	MU: EMPLUYEU			1	7		1	1
1,351   729   2   407   162   1   50						3	1	1
FEDERAL GOVERNMENT		1;351	729	2	407	162	1	50
NONPROFIT ORGANIZATIONS	reverat GUVERNMENT							
NOT EMPLOYED	MILITARY	25		1		i	1	4
SELF-EMPLOYED	INDUSTRY AND BUSINESS	100	24	1	34	1	- 1	
NO REPORT	SELF-EMPLOYED			- 1	29	14		4
OTHER FIELOS	MO1 EMPLOYEO	10	2		7			
OTHER FIELOS						33		-
EDUCATIONAL INSTITUTIONS		20,770	3,269	34	6 × 865			
## SELF-EMPLOYED	FEDERAL GOVERNMENT		1,538	6				
NONPROFIT ORGANIZATIONS	UINEK GUVERNMENT — = = = = = =		174		422			
110031RY AND BUSINESS	MUMPRUFII ORGANIZATIONS	578	29	4			7	8
OTHER	SELF-EMPLOYED	11,074	140	-	180	191	4	3
NO REPORT 979 104 2 360 484 11 18	UIAEK		49	1	95	206		
72 1 41 =1001141 / 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		979						1
	SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL				40			

			нганалк	9€G14 E E			NO OFFICE	
SCIENTIFIC AND TECHNICAL FIFLS AND WORK ACTIVITY	TOTAL	<b>.</b> п.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR'S	LESS THAN BACHELOR'S DEGREE	NO REPORT OF COGREE	
ALL FIELDS	223,854	79,372	5•925	61.222	72,364	2,878	2,093	
RESEARCH AND DEVELOPMENT (4)	77,699 35,781 30,280 46,255	31,674 20,343 10.362 15,244	2,609 1,426 1,174 885	20,380 7,282 7,769 11,237	22,002 6,434 8,563 17,565	488 112 206 771	546 134 207 553	
OF RESEARCH AND DEVELOPMENT TEACHING	24,568 41,209 16,582 26,301 9,617 6,191	10:732 22:673 723 5:430 1:79: 1:847	552 888 14 1.173 61 295	5,198 12+375 3+494 A+050 3+555 1+651	7,002 +604 11,731 10,315 3,986 2,161	242 27 332 1,012 128 120	252 142 288 341 106 117	
CHEMISTRY	53,053	21,789	368	12,229	27,377	590	700	
RESEARCH AND DEVELOPMENT (A)	276645 12,472 10,607 13,125	11.033 6.924 5,681 5.097	283 233 50 26	5, 273 2,056 2,477 2,420	10,373 3,162 4,211 5,275	167 37 92 134	216 60 96 173	
OF RESEARCH AND DEVELOPMENT	8,740 5;798 9,485 2,242 3,168 1,590	4,210 3,541 457 516 592 453	18 16 3 26 10 4	1,578 1,194 1,04 401 705 312	2,763 923 7,118 1,189 1,738 761	70 4 204 25 32 24	95 20 199 25 31 36	
EARTH SCIENCES	17,907	3,578	1	5+329	8,101	254	144	
RESEARCH AND DEVELOPMENT (4)	2,826 1,696 1,112 2,614	1,067 766 298 478		735 543 439 694	740 359 369 1•352	18 14 4 56	16 14 2 34	
OF RESEARCH AND DEVELOPMENT	964 2•545 939 7•392 962 629	297 1,383 37 427 115 71	1	285 820 296 2•542 319 184	357 333 592 4,243 495 346	13 2 16 120 25 17	12 6 8 60 9	
METEOROLOGY ~	5,510	479		1+137	2,524	1.147	223	
RESEARCH AND DEVELOPMENT (A)	1;043 519 505 1;265	264 203 60 90		377 154 219 307	342 131 198 596	44 22 21 230	16 9 7 42	
OF RESEARCH AND DEVELOPMENT	346 222 68 2•596 140 176	67 92 1 13 2 17		116 65 10 313 27 33	134 51 42 1,369 56 68	21 12 13 757 46 45	8 2 2 144 9 8	
PHYSICS	26,698	10,286	30	8,352	7,673	185	172	
RESEARCH AND DEVELOPMENT (A)	14;345 8;040 4;244 4;018	5,704 4,260 1,231 1,714	14 4 4 1	4,240 2,116 1,496 997	4,206 1,613 1,446 1,226	95 20 36 61	86 27 31 29	
OF RESEARCH AND DEVELOPMENT	3.083 5.368 221 775 1.350 621	1,436 2,415 6 168 118 161	1 3 7 5	770 2•001 40 245 619 220	821 931 160 331 603 216	35 3 6 11 2 7	20 15 9 13 8 12	
HATHEMATICS	17,411	4,603	5	7,464	4,917	210	212	
RESEARCH AND DEVELOPMENT (A)	5.587 1.659 2.149 3.444	1,549 995 482 644	3	2,135 475 1,010 1,260	1,764 166 618 1,392	73 5 20 68	66 18 19 77	
OF RESEARCH AND DEVELOPMENT	1,916 5;023 1,080 1;340 562 375	426 2,055 32 141 71 111	1	726 2+600 396 600 323 150	690 354 600 546 150 103	31 1 33 30 1 4	40 13 19 22 9 6	

TABLE A-4.-NUMBER OF SCIENTISTS, BY FIELDS WORK ACTIVETY. AND HIGHEST DEGREE, 1984 - CONTINUED

			1:15/25*		LESS THAN	NO REPORT	
SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	70TAL	PH.D.	FROPESSIONAL MEDICAL	F"SYER*3	BACHELOR*S	BACHEZOR'S DEGREE	OF DEGREE
AGRICULTURAL SCIENCES	9;526	2,367	11	2,675	4,362	63	47
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	2,729 847	1,189	3	954 276	571 177	8	4
APPLIED RESEARCH	16812 4,287	791 519	2 2	657 920	351 2,775	8 38	3 33
OF RESEARCH AND DEVELOPMENT	1+136 893 257	398 430 14	1	323 339 69	398 120 166	10 1 7	5 2 1
NOT EMPLOYED	835 160 365	86 39 90		235 62 97	501 56 173	6 1 2	3 2 2
BIOLOGICAL SCIENCES	27+135	13,355	55408	5•028	3,172	71	101
RESEARCH AND DEVELOPMENT (A)	10;980 7;388 3;531 4;110	6:061 4:586 1:454 2:119	25 284 1. 178 1. 104 822	1,608 1,005 584 583	964 559 370 538	18 9 6 30	45 31 13 18
OF RESEARCH AND DEVELOPMENT	2;492 7;785 348	1,533 4,143 34	514 857 11	237 1,904 117	195 864 175	4 2 8	9 15 3
OTHER	2;087 839 986	374 207 417	1+104 49 281	305 356 155	288 <b>2</b> 23 120	6 1 6	10 3 7
PSYCHOLOGY	16#804	10,843	52	5,464	417	4	24
RESEARCH AND DEVELOPMENT (A)	46108 1397 25595 2849	2,329 1,156 1,114 1,899	18 9 8 6	1,660 200 1,409 849	96 29 62 91	3	5 3 2 1
OF RESEARCH AND DEVELOPMENT TEACHING PRODUCTION AND INSPECTION OTHER	1;079 3;670 11	807 3,085	6 4	243 531 1	22 47 8	<u></u>	3 1
UTHER	5,145 658 360	3,077 262 190	23	1+912 356 155	125 37 13	1	10 3 1
STATISTICS	2;843	804	3	1,133	810	43	50
RESEARCH AND DEVELOPMENT (A)	854 170 552 694	252 101 141 144	2 2 1	370 40 267 260	205 21 130 256	11 3 5 18	14 5 7 15
OF RESEARCH AND DEVELOPMENT	346 484 374 289	96 323 13 51		147 143 140 144	91 16 204 88	5 9 1	7 2 8 5
NOT EMPLOYED	66 82	16		38	18 23	2 2	3 3
ECONOMICS	124143	5,091	2	4,204	2;613	90	143
RESEARCH AND DEVELOPMENT (A)	1;927 584 1;296 3;534	986 369 615 1,089	1 1	740 168 556 1,145	181 42 114 1;197	1 51	16 5 9 51
OF RESEARCH AND DEVELOPMENT	1.288 3.469 1.215 1.091	559 2+368 72 234	1	418 968 425 545	276 108 690 282	16 14 13	16 25 14 17
NOT EMPLOYED	510 397	176 165		239 142	82 73	6 3	13
SOCEOLOGY	2:703	2,179	9	434	65	3	13
RESEARCH AND DEVELOPMENT (A)	593 380 209 440	479 336 143 333		93 34 59 81	18 8 7 17	1	3 2 4
OF RESEARCH AND DEVELOPMENT	247 16406 9 92	194 1,191 50	1	43 198 3 28	7 11 5 10	1 1 1	1 2 1 2
NOT EMPLOYED	97 66	69 57		23 8	1		

ERIC Full Text Provided by EBIC 94

			HI <b>G</b> HES <b>T</b>	DEGREE		LESS THAN	ND REPORT
SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	₽H•D•	PROPESSIONAL MEDECAL	MASTER'S	BACHEEDR S	8ACHELDRAS DBGRBE	
LINGUISTICS	14351	729	2	407	162	1	50
RESEARCH AND DEVELOPMENT (A)	214 132 77 171	94 6 <b>8</b> 26 100	1	70 36 33 47	43 23 17 21		7 5 1 2
TEACHING	64 695 4 81 126 60	41 463  28 21 23		15 177  30 69 14	7 29 2 18 33 16	1	1 26 1 5 3 6
OTHER FIELDS	20; 770	3,269	34	6,865	10;171	217	214
RESEARCH AND DEVELOPMENT (A)	4,849 517 1,591 5,704	667 187 326 1•018	4 1 3 18	14575 179 562 1+684	25499 144 670 25829	51 2 13 81	52 4 17 74
DF RESEARCH AND DEVELOPMENT	2;867 3;851 2;571 2;333 979 484	662 1,084 56 265 104 75	7 2 1	887 1,935 503 670 360 138	1.241 817 1.969 1.325 484 248	33 2 21 41 11 10	38 11 22 25 18 12

(A)INCLUDES DEVELOPMENT OR DESIGN. NOT SEPARATELY ISEMTSFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF SEMER THAN RESEARCH AND DEVELOPMENT. NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964%

.

			HIGHEST C	ECOEE			
SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	PH.D.	PROFESSIONAL HEDICAL	MASTER*S	BACHELOR*S	LESS THAN BACHELOR'S DEGREE	NO REPORT OF DUGREE
ALL FIELOS	223,854	79.372	5•925	61,222	72; 364	2,878	2,093
1 YEAR	8,303 34,864 45,249 42,706 26,304 53,778 12,650	2:191 9:447 15:610 16:769 9:837 22:446 3:072	97 563 1,054 1,110 913 1,905 283	2,258 11,328 13,751 11,670 6,522 11,846 3,847	3,737 13,315 14,200 12,305 8,099 19,481 5,227	79 368 498 603 1,219	20 132 266 354 330 881 110
1 YEAR	3,291 9,242 10,812 11,218 6,862 17,008 4,620	862 2,832 4,182 4,155 2,283 6,468 1,007	368 65 88 81 54 58 16	512 1.711 2.087 2.400 1,403 3,118 998	27, 377 1, 898 4, 595 4, 383 4, 388 2, 941 6, 609 2, 563	590 	700 13 31 44 116 106 366 24
EARTH SCIENCES	17,907	3,578	1	5,829	8,101	254	144
1 YEAR	781 2+157 3+399 4+093 2+403 3+800 1+274	92 423 657 746 442 1,108 110	1	314 993 1,435 1,258 561 857 411	374 728 1,283 2,047 1,325 1,642	3 1 6 2 1 5 2 1 3 3 2 9	1 10 7 21 23 60 22
METEOROLOGY	5,510	479		1,137	2,524	1.147	223
1 YEAR	149 708 941 1,019 988 1,506	8 44 81 111 64 161		19 130 211 222 154 346 55	120 497 473 361 362 619 92	29 154 271 346 313 34	2 8 22 54 62 67 8
PHYSICS	26,698	10,286	30	8,352	7,673	185	172
1 YEAR	1,265 6,507 6,043 4,634 2,382 4,484 1,383	345 1,586 2,330 2,261 1,163 2,404	1 3 4 15 3 3	458 2,231 1,937 1,340 654 1,160 572	459 2,656 1,712 969 505 776 596	7 34 29 34 77 4	2 24 26 20 23 64 13
MATHEMATICS	17,411	4,603	5	7,464	4,917	210	212
1 YEAR	246 3.262 5.328 3.630 1.670 2.729	160 592 963 1,025 536 1,155	2 1 2	43 1,797 2,195 1,469 719 1,021	43 837 2,000 1,054 372 472 139	20 91 32 23 35	16 77 49 20 44
AGRICULTURAL SCIENCES	9,526	2,367	11	2,676	4,362	63	47
1 YEAR	189 1,451 2,008 1,923 1,309 2,337 309	38 196 428 514 403 725 63	2 1 1 2 2 4	93 427 581 534 348 578	58 816 984 856 538 984 126	 4 5 9 9 35 1	6 9 9 9
BIOLOGICAL SCIENCES	27+135	13,355	5;408	5,028	3,172	71	101
1 YEAR	708 4,007 5,468 5,128 3,183 7,344 1,297	299 1,453 2,710 2,898 1,586 3,934 475	89 484 944 997 842 1,792 260	218 1,083 1,155 804 442 981 345	1 02 979 641 404 289 549 208	2 1 9 8 47 4	6 17 16 16 41 5
1 YEAR	16,804	10,843	52	5,464	417	4	24
2 TO 4	337 2,347 3,720 3,952 2,162 3,321 965	184 1,231 2,214 2,752 1,498 2,407 557	1 6 12 7 5 19 2	136 1,023 1,417 1,124 614 785 365	16 84 76 67 43 95	2 2 2	3 1 2 13 5

TABLE A-5.-NUMBER OF SCIENTISTS. BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE. AND HIGHEST DEGREE: 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND			ніснест	DEGREE		LESS THAN	NO REPORT
YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR*S	BACHELOR'S DEGREE	OF DEGREE
STATISTICS	2,843	804	3	1,133	810	43	50
1 YEAR	22 422 668 620 411 609 91	15 102 167 172 132 194 22	1 1 1	4 238 277 243 138 195 38	3 80 202 186 125 187 27	1 8 11 5 18	1 13 8 10 14 4
ECONOMICS	12,143	5,091	2	4,204	2,613	90	143
1 YEAR	372 1.446 1.993 2.078 1,729 3.720 805	87 473 844 917 842 1,686 242	2	232 722 766 697 449 954 384	52 243 369 444 400 943 162	1 7 17 61 4	1 8 13 11 21 76 13
SOCIOLOGY	2,703	2,179	9	434	65	3	13
1 YEAR	35 255 608 579 394 739 93	27 231 420 462 332 631 76	2 1 2 4	6 16 170 108 45 81 8	2 4 15 6 12 17	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 3 3 5
LINGUISTICS	1,351	729	2	407	162	1	50
1 YEAR	45 210 316 257 140 285 98	10 54 144 160 103 224 34	2	25 104 123 69 23 29 34	10 47 44 12 8 13 28	1	5 5 14 6 18 2
OTHER FIELDS	20,770	3,269	34	6,865	10,171	217	214
1 YEAR	863 2,850 3,945 3,575 2,671 5,896	64 230 470 596 453 1•349	1 4 4 22 3	198 853 1.397 1.402 972 1.741	600 1,749 2,018 1,511 1,179 2,575 539	29 31 32 167	1 13 31 31 31 102

SCIENTIFIL AND TECHNICAL FIELD AND AGE	TOTAL	EDUCA- TIUNAL INSTI- TUTIONS	FECERAL GOVERN MENT	OTHER GOVERN- HENT	MILITARY	NONPROFIT ORGANIZA- TIONS	ANO	SELF— EMPLOYED	OTHER		NO REPORT OF TYPE OF EMPLOYER
ALL FIELDS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
20-24	8,247 34,102 39,896 40,148 35,831 24,726 16,921 11,308 6,966 3,428 1,992 25,9	3,644 13,043 14,159 13,017 11,229 7,796 5,625 4,236 2,917 1,367 369 124	324 2,670 3,848 4,051 4,020 3,755 2,381 1,691 763 311 51 40	136 929 1,292 1,424 1,294 833 649 477 269 127 31	464 1,483 1,067 825 884 541 174 66 1;	111 972 1,654 1,875 1,609 972 659 430 259 101 73	1,781 11,495 15,845 17,109 15,137 10,i52 6,503 3,670 1,988 466 205 70	13 100 308 751 843 659 538 396 288 212 162	31 172 228 234 257 163 141 86 71 31 17	2,878 1,317 727 464 266 183 206 351 784 1,054	173 360 178 135 94 89 67 50 45 28 30 8
CHEMISTRY	63,053	13,616	4+004	889	648	1,679	1,028	589	311		90
20-24	3,841 10,355 10,157 10,357 9,687 7,294 4,918 2,934 1,878 943 594	1,703 3,155 2,346 1,518 1,067 718 542 457 225 49	103 497 584 712 682 563 383 258 139 72 10	52 150 128 148 130 89 79 56 28 28	166 303 70 20 42 28 13 6	55 205 297 346 307 196 112 80 46 17	1,028 4,937 6,320 7,030 6,742 5,152 3,437 1,890 1,002 213 83 25	20 58 93 96 95 77 66 40 34	40 50 48 53 35 27 18 12	954 307 156 107 58 48 62 126	106 35 13 13 10 7 5 4 2 6
EARTH SCIENCES	17,907	4,023	2,325	658	241	216	8,400	821	87	962	174
20-24	658 2,141 3,317 3,752 3,098 1,799 1,206 976 532 177 19	4	22 192 386 446 470 309 205 184 71 27 9 4	26 97 142 141 111 55 40 24 12 9	46 96 25 20 29 20 2 3 	6 26 53 29 35 22 19 17 7 2	77 36 9		11 14	6 129 78 4 51 7 24 1 22 7 27 3 53 - 93 1 91 - 3	5 5
#ETEGROLOGY	113	<del> </del> -	10	1	58		7		1	- 7	
20-24	67? 968 892 1,166 973 - 384 228 - 62 - 11	116 89 66 96 64 25 24 7 5	135 250 232 351 424 231 172 41 9	3 10 3 24 14 14 9 2 3	295 473 464 489 283 46 4	3	100 89 134 118 54 15 8 2	1 3 7 3 2 		1 26 1 13 3 3 6 32 3 32 5 6 6 32 7 7	3  4 1  2 
PHYSICS	26,698		2,913	89	473		+			701	20
20-24	1,563 5,686 5,730 4,409 3,528 1,193 1,193 865 604 224 85	3,249 2,347 1,616 1,303 687 547 414 230 129	602 621 528 437 257 164 115 71 22	23 26 11 5 9 7 2 5	205 100 55 37 30	200 233 207 169 72 52 28	1,698 2,187 1,874 1,498 2,387 2,77 3,144 3,10	9 14 22 28 23 18 22 11 6			15 10 4 4  2 2 
MATHEMATICS	17,411	+	+	211	<del></del> -			<del>-}</del>	+-	3 20	<del> </del>
20-24	34; 3,70; 4,30; 3,43; 2,25; 1,30; 60; 35; 166;	1,567 1,555 1,156 2 845 1 613 2 494 1 393 9 246	174 252 229 185 112 95 3 30	38 35 27 15 17 22 12	73 58 54 54 54 19	140 140 140 140 140 140 140 140 140 140	1,444 1,99 1,65 0,93 2,43 1,22 1,1 6,1 1,6 1,6 1,6 1,6 1,6 1,6 1,6 1,6	10 22 11 10 22 23 24 24 34 44 35 36	5	19 200 16 14 15 74 14 3 4 16 3	31 5 11 8 4 4 5 3 4 3 4 3 4 2 1

		TYPE OF EMPLOYER									
SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	EDUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	MILITARY	NONPROFIT ORGANIZA- TIONS	INOUSTRY AND BUSINESS	SFLF- EMPLOYEO	OTHER		ND REPORT OF TYPE OF EMPLOYER
AGRICULTURAL SCIENCES	9,526	2,833	3,295	1,440	47	99	1,382	174	36	160	60
20-24	133 1,279 1,700 1,574 1,621 1,241 874 590 280 133 55	35 319 465 400 514 451 267 103 106 59 11	40 458 623 548 490 375 372 250 92 26 1	25 241 288 280 251 161 90 59 30 10	5 32 4 2 2 2 	8 16 13 20 15 13 6 4 1	13 146 240 276 298 201 104 55 26 8 7	4 17 20 30 28 22 18 12 10 6	 7 1 4 8 4 2 1 3 2 3	34 18 4 3  7 6	3 13 9 3 6 9 7 5 3 2
BIOLOGICAL SCIENCES	27,135	15,872	2,916	1,203	790	1,775	2,720	. 647	202	839	171
20-24	351 2,800 4,513 5,347 4,514 3,332 2,436 1,827 1,160 531 247 77	252 1.670 2.717 3.218 2.621 1.888 1.363 1.047 660 315 71	9 212 463 560 518 401 274 253 149 58 11	10 132 183 187 180 153 118 130 66 31	4 126 188 112 121 107 80 39 11	9 131 257 389 307 240 184 112 90 36 19	14 182 397 623 582 371 276 152 76 28 13	13 47 111 110 108 95 65 53 25 18	1 22 42 25 24 20 11 19 8 4	187 95 37 20 17 11 24 25	5 35 32 27 14 20 9 7 12 4 3
PSYCHOLOGY	16,804	8,162	1,378	1,901	230	1,574	1,362	1,144	274	658	121
20-24	35 1,220 2,838 3,739 3,299 2,047 1,493 984 589 290 237 33	17 603 1,455 1,816 1,513 1,016 730 510 325 120 39	4 86 203 305 276 204 153 95 34 14 3	3 143 349 455 392 198 162 107 59 23 8	72 47 32 41 24 11 2	2 112 310 384 341 159 124 72 37 19	3 92 246 332 333 170 109 45 26 3 3	3 79 242 269 189 143 98 51 40 27	16 32 57 59 36 31 21 14 6	102 94 58 43 15 23 37 61	1 11 16 22 17 8 15 11 5 4 7
STATISTICS	2,843	778	568	122	31	139	1,055	25	38	1	21
20-24	22 377 572 543 462 379 228 151 80 16 12	11 118 174 132 118 98 50 40 27 5	39 52 89 93 129 88 56 17 3	8 20 19 19 17 19 10 9	1 13 7 3 4 2 1 	17 33 38 19 19 5 4 3	7 151 255 244 192 97 54 35 18 1	1 3 3 6 3 4 3 2 	3 8 5 7 8 3 1 1 1	14 4 3 4	4 6 6 1 2  1 1
ECONOMICS	12,143	5,061	1,274	284	83	465	3,967	195	207	├──	97
20-24	148 1,130 1,905 1,934 2,151 1,680 1,210 835 538 353 238 21	51 469 871 799 925 664 471 345 253 157 45	6 73 192 163 197 203 195 129 64 47 3	3 24 37 44 48 42 43 18 16 6	12 32 8 11 9 10 1 	1 33 86 85 83 60 49 40 16 8	33 366 610 740 776 624 382 246 130 41 16	2 12 9 21 26 33 19 22 18 17 16	3 18 33 24 49 23 24 17 9 6	87 44 30 25 15 17 13 28 65	2 16 15 17 13 6 9 5 4 6 4
20C10F06A	2,703	2,080	137	115	10	160	55	20	21	<b>+</b>	8
20-24	6 92 355 513 517 414 311 191 144 85 73	3 70 284 396 408 331 236 145 112 65 28	1 3 18 28 19 19 24 15 6 4	14 22 29 21 15 6 5	1 2 3 3 1 	6 17 26 36 25 16 17 11	5 9 15 10 7 5 2 2	1 3 4 4 4 3 2 1 2	1 1 7 1 3 5 2 1	11 10 2	2 1 1 1  1

TABLE A-6.-NUMBER OF SCIEN'ISTS, BY FIELD, AGE AND TYPE OF EMPLOYER, 1964 - CONTINUED

					TYPE OF	EMPLOYER					
SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	EDUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT		MILITARY	NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF-	OTHER	EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
LINGUISTICS	1,351	930	72	25	1	100	64	4	10	126	19
20-24	26 162 239 274 215 132 120 92 52 20 13	11 91 149 189 153 103 96 71 42 15 6	3 14 10 14 12 8 9 2	1 7 3 3 2 2 2 2 4 1	1	11 28 32 14 6 6 1	1 8 15 14 13 ',' 4 2 3	1	1 2 1	13 34 26 19 16 2 3 3 6 2	7 1 3 
OTHER FIELDS	20,770	5,028	1,553	458	578	524	11,074	359	124	979	93
20-24	998 3,400 3,298 3,375 3,321 2,336 1,668 1,074 688 311 194 27	254 828 879 819 708 470 408 328 219 77 30 8	21 196 190 201 288 247 189 125 64 26 5	12 62 55 71 76 77 90 37 25 11 2	117 235 84 49 53 17 11 10 2	10 58 71 111 117 57 39 28 15	400 1.783 1.834 1.979 1.965 1.386 877 472 281 54 32	4 11 24 49 50 52 52 32 25 30 29	3 24 19 24 17 14 9 5 6 2	161 257 128 64 43 27 27 33 47 101 87	16 26 14 8 4 9 6 4

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

100

		TYPE OF EMPLOYER									
SCIENTIFIC AND TECHNICAL FIELD AND HORK ACTIVITY	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	MILITARY	NÖNPRÖFIT ORGANIZA- TIONS	AND	SELF- Employed	OTHER		NO REPORT OF TYPE OF EMPLOYER
ALL FIELOS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9•617	1,257
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH	77,699 35,781 30,280 46,255	26,392 19,894 6,047 5,778	10.242 5.002 4.535 7.442	2,006 779 1,148 2,528	999 531 405 1,854	4,344 2,334 1,739 2,086	32,741 6,863 15,924 25,563	343 80 194 569	478 210 231 347		154 88 57 88
OF RESEARCH AND DEVELOPMENT TEACHING	24,568 41,209 16,582 26,301 9,617 6,191	2,793 39,926 249 3,325 	3,846 203 1,274 3,654	908 302 601 1,798	631 242 ,180 1,909	1.257 154 245 1.689	14,722 170 13,693 10,602	203 34 214 2,865	171 98 98 358	9,617	37 80 28 101
CHEMISTRY	63.053	13,616	4,004	888	648	1,679	37,859	252 589	311	3.168	806 291
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	27.645 12,472 10,607 13,125	6,522 5,908 567 602	2,286 1,401 781 857	296 195 89 173	226 157 63 169	1,068 779 268 313	17,030 3,928 8,755 10,788	57 13 30 139	130 69 48 72		30 22 6 12
OF RESEARCH AND DEVELOPMENT TEACHING	8,740 5,798 9,485 2,242 3,168	328 5,678 109 360	638 20 557 204	62 17 300 69	55 26 63 72	192 12 111 142	7,360 25 8,189 1,106	64 3 96 248	33 13 51 37	3,168	8 4 9 4
EARTH SCIENCES	1,590	345 4,023	80 2,325	33 658	92 241	216	721 8,400	821	87	962	232 174
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	2,826 1,696 1,112 2,614	918 764 151 217	928 537 388 511	142 90 52 155	20 5 15 91	118 90 28 47	658 180 466 1,503	18 13 5 73	19 15 4 16		5 2 3 1
OF RESEARCH AND DEVELOPMENT TEACHING	964 2•545 939 7•392 962 629	106 2,483 10 277 	294 10 86 718	77 7 63 275 	29 22 3 63 	26 6 3 39 3	401 6 721 5,343	23 45 624 	8 7 7 33 	962	4 1 20
METEOROLOGY	5,510	527	1,857	78	2,113	152	594	18	16	140	143
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	1,043 519 505 1,265	276 204 68 34	416 188 223 467	21 6 15 22	59 8 51 576	98 54 43 37	164 55 100 122	3 1 2 3	5 2 3 4		1 1
OF RESEARCH AND DEVELOPMENT TEACHING	346 222 68 2,596 140 176	22 165  35 	153 12 23 894 	11 2 10 20 	64 37 18 1,360	29  14 3	64 4 16 260 	9	3 1 1 4 	140.	13
PHYSICS	26,698	11,611	2,913	89	473	1,011	8.954	166	25	1.350	106
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH AMAGEMENT OR ADMINISTRATION (B) - MANAGEMENT OR ADMINISTRATION	14,345 8,040 4,244 4,018	5,380 4,608 549 556	2.015 1.039 754 692	47 35 7 20	119 56 45 209	723 416 226 206	5,984 1,830 2,636 2,288	44 8 18 41	16 9 5 3		17 9 4 3
OF RESEARCH AND DEVELOPMENT TEACHING	3,083 5,368 221 775 1,350 621	339 5,259 5 117 	618 28 29 106 	11 4 5 11	102 39 6 63 	164 16 2 46 	1,817 17 169 360	27 1 3 68	2 1 2 2	1,350	3 3 2
MATHEMATICS	17,411	7,206	1,113	211	277	828	6,935	115	83	562	81
RESEARCH AND DEVELOPMENT (A) 8ASIC RESEARCH	5:587 1:659 2:149 3:444	1,536 1,148 316 440	533 99 317 310	56 24 21 44	55 7 30 122	432 83 226 237	2,907 279 1,206 2,254	21 2 12 19	33 11 13 17		14 6 8 1
OF RESEARCH AND DEVELOPMENT TEACHING	1,916 5,023 1,080 1,340 562	210 4,827 48 209	228 24 109 103	27 57 14 31	54 24 26 43	169 8 81 60	1,209 62 787 811	10 4 7 60	8 7 5 19	562	1 10 3 4
NO REPORT	375	146	34	9	7	10	114	4	2		49

ERIC Provided by ERIC

		TYPE OF EMPLOYER									
SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	YOT AL	EDUCA- TIDNAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	MILITARY	NDNPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF- ENPLOYED	OTHER	NOT EMPŁOYEO	NO REPORT OF TYPE OF EMPLOYER
AGRICULTURAL SCIENCES	9, 526	2,833	3,295	1,440	47	99	1,382	174	36	160	60
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	2,729 847 1,812 4,287	1,295 451 840 401	863 288 541 1,919	301 79 211 899	3 2 1 19	24 6 17 43	208 14 178 901	16 12 76	9 2 7 14		10 5 5 15
OF RESEARCH AND DEVELOPMENT - TEACHING	1,136 893 257 835 160	277 860 20 141	352 11 98 297	294 12 56 130	2 3 10	16 3 24	175  74 150	3 71	8 3 1 5	160	5 4 2 7
BIDLOGICAL SCIENCES	365 27, 135	116	2,916	1,203	12 790	1,775	49	647	303		22
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH MANAGEMENT OR ADMINISTRATION (B) - MANAGEMENT OR ADMINISTRATION	10,980 7,368 3,531 4,110	6,257 4,751 1,498 1,098	1,691 1,073 609 788	424 237 183 415	371 237 132 249	889 609 279 340	2,720 1,192 357 779 1,078	51 22 28 66	72 55 17 57	839	33 27 6 19
OF RESEARCH AND DEVELOPMENT TEACHING	2,492 7,785 348 2,087 839 986	645 7•527 19 447	522 34 101 218 	148 77 50 181 	166 18 10 113 	179 72 12 384 	766 6 146 215	21 5 5 475 4	38 24 2 37	839	7 22 3 17
PSYCHOLLGY	16, 804	8,162	1,378	1,901	230	1+574	1,362	1,144	274	658	121
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH MANAGEMENT OR ADMINISTRATION (B) MANAGEMENT OR ADMINISTRATION	4,108 1,397 2,595 2,849	2,080 918 1,148 1,052	413 158 244 348	488 64 418 405	83 40 40 70	452 120 311 <b>3</b> 51	427 57 313 532	64 12 51 25	79 19 58 55		22 9 12 11
OF RESEARCH AND DEVELOPMENT TEACHING	1,079 3,670 11 5,148 658 360	309 3,527  1,351 	173 9  587 	96 65 2 902 	42 8  64 5	166 21  729  21	270 8 9 358 	13 1,006	12 12  117	658	2 7  34 
STATISTICS	2,843	778	568	122	31	139	1,055	25	38	66	21
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	854 170 552 694	179 86 89 78	180 21 121 212	54 8 37 38	10 4 6 9	84 18 56 36	326 29 228 297	7 6 4	11 2 8 17		3 2 1 3
OF RESEARCH AND DEVELOPMENT TEACHING	346 484 374 289 66 82	46 462 5 31 	93 7 91 60 	29 4 14 9 	3 3 4 3	25 1 8 8 	139 2 247 167	1 8	8 3 4 3	66	1 2
ECDNOMICS	12, 143	5,061	1,274	284	83	465	3,967	195	207	510	97
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH MANAGEMENT OR ADMINISTRATION (B) - MANAGEMENT OR ADMINISTRATION	1,927 584 1,296 3,534	844 367 477 519	418 97 316 517	86 18 68 112	5 2 2 40	193 56 136 179	284 26 219 2,037	15 1 13 52	73 16 57 64		9 1 8 14
OF RESEARCH AND DEVELOPMENT TEACHING	1,288 3,469 1,215 1,091 510 397	188 3,416 12 124 	281 11 66 218	72 6 16 52 	7 15 4 9 	111 2 15 66 	571 4 1,065 479 	14 2 20 90	38 6 11 45 8	510	6 7 6 8 
SOCIOLOGY	2,703	2,080	137	115	10	160	55	20	21	97	8
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH MANAGEMENT OR ADMINISTRATION (B) - MANAGEMENT OR ADMINISTRATION	593 380 209 440	408 305 103 215	59 25 33 53	32 14 18 60	2 1 1 4	54 19 34 80	19 4 13 20	9 6 3 3	8 5 3 5		2 1 1
OF RESEARCH AND DEVELOPMENT TEACHING	247 1,406 9 92 97 66	111 1,382 1 27 	36 3 2 16	33 6 1 13	2	46 4  19  3	13 1 5 9	2 3 5	3 6 1 1	97	4 4 6

		TYPE OF EMPLOYER									
SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	TOTAL	ETUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN— MENT	OTHER GOVER <del>N-</del> MENT	MILITARY	NONPROFIT ORGANIZA- TIONS	AND	SELF- Enployed	OTHER		NO REPORT OF TYPE OF EMPLOYER
ALL FIELOS	223.854	77,727	23,405	7,472	5+522	8,722	84•421	4,277	1,434	9,617	1,257
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH	77,699 35,781 30,280 46,255	26,392 19,894 6.047 5.778	10,242 5,002 4,535 7,442	2,006 779 1,148 2,528	999 531 405 1•854	4,344 2,334 1,739 2,086	32,741 6,863 15,924 25,563	343 80 194 569	478 210 231 347		154 88 57 88
OF RESEARCH AND DEVELOPMENT TEACHING PRODUCTION AND INSPECTION OTHER NOT EMPLOYED	24,568 41.209 16,582 26,301 9,617	2,793 39,926 249 3,325	3,846 203 1,274 3,654	908 302 601 1,798	631 242 180 1•909	1.257 154 245 1.689	14,722 170 13,693 10,602	203 34 214 2,865	171 98 98 358		37 60 28 101
NO REPORT	6,191	2.057	590	237	338	204	1,652	252	55	9,617	806
CHEMISTRY	63,053	13,616	4,004	888	648	1,679	37,859	589	311	3,168	291
BASIC RESEARCH APPLIED RESEARCH	12,472 10,607 13,125	6,522 5,908 567 602	2,286 1,401 781 857	296 195 89 173	226 157 63 169	1+068 779 268 313	17,030 3,928 8,755 10,779	57 13 30 139	130 69 48 72		30 22 6 12
OF RESEARCH AND OEVELOPMENT TEACHING PRODUCTION AND INSPECTION OTHER NOT EMPLOYED	5,740 5,798 9,485 2,242 3,168	328 5,678 109 360	638 20 557 204	62 17 300 69	55 26 63 72	192 12 111 142	7,360 25 8,189 1,106	64 3 96 248	33 13 51 37		8 4 9 4
NO REPORT	1,590	345	80	33	92	33	721	46	8	3,168	232
RESEARCH AND DEVELOPMENT (A)	17•907 2•826	4,023 918	928	658 142	241	216	8•400 658	821	87 19	962	174
BASIC RESEARCH APPLIED RESEARCH	1,696 1,112 2,614	764 151 217	537 388 511	90 52 155	5 15 91	90 28 47	180 466 1,503	13 5 73	15 4 16		2 3 1
OF RESEARCH AND DEVELOPMENT TEACHING PRODUCTION AND INSPECTION OTHER	964 2•545 939 7•392	106 2,483 10 277	294 10 86 718	77 7 63 275	29 22 3 63	26 6 3 39	401 6 721 5•343	23  45 624	8 7 7 33	-4	1 20
NOT EMPLOYED	962 629	118	72	16	42	3	169	61	5	962	143
METEOROLOGY	5,510	527	1,857	78	2.113	152	594	18	16	140	15
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	1.043 519 505 1.265	276 204 68 34	416 188 223 467	21 6 15 22	59 8 51 576	98 54 43 37	164 55 100 122	3 1 2 3	5 2 3 4		1
OF RESEARCH AND DEVELOPMENT - TEACHING	346 222 68 2•596 140	22 165  35	153 12 23 894	11 2 10 20	64 37 18 1,360	29  14	64 4 16 260	9	3 1 1 4	140.	;
NO REPORT	176 26,698	17	45 2,913	89	63 473	3	28	3	1		13
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH	14.345 8.040 4.244 4.018	5+380 4+608 549 556	2,015 1,039 754 692	47 35 7 20	119 56 45 209	723 446 226 206	5.984 1.830 2,636 2.288	166 44 8 18 41	25 16 9 5 3	1.356	106 17 9 4 3
OF RESEARCH AND DEVELOPMENT TEACHING	3,083 5,366 221 775 1,350	339 5,259 5 117	618 28 29 106	11 4 5 11	102 39 6 63	164 16 2 46	1.817 17 169 360	27 1 3 68	2 1 2 2	1,350	3 3 2
NO REPORT	621	294	43	2	37	18	136	9	1		81
MATHEMATICS	5,587 1,659 2,149 3,444	7,206 1,536 1,148 316 440	533 99 317 310	56 24 21 44	55 7 30 122	828 432 83 226 237	2.907 279 1.206	21 2 12 12	83 11 13	562	81 14 6 8
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT TEACHING	1,916 5,023 1,080 1,340	210 4,827 48 209	228 24 109 103	27 57 14 31	54 24 26 43	169 8 81 60	2,254 1,209 62 787 811	19 10 4 7 60	17 8 7 5		1 1 10 3 4
NOT EMPLOYED NO REPORT	562 375	146	34	9	7	10	114	4	2	562 	49

ERIC Aruthat Provided by EBIC

TABLE A-7.-NUMBER OF SCIENTISTS, BY FIELD, WORK ACTIVITY AND TYPE OF EMPLOYER, 1964 - CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND HORK ACTIVITY		TYPE OF EMPLOYER									
	TOTAL		FEDERAL GOVERN- MENT	DTHER GOVERN- MENT	MILITARY	NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINEGS	SELF-		EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
LINGUISTICS	1,351	930	72	25	1	100	64	6	10	126	19
RESEARCH AND DEVELOPMENT (A)	214	110	16	2		54	25	2	_		
BASIC RESEARCH	132	87	3			29	1 8	•	7		
APPLIED RESEARCH	77	22	13	2		25	13	1 ;	1 1		
MANAGEMENT OR ADMINISTRATION (B) MANAGEMENT OR ADMINISTRATION	171	93	26	11	1	17	20		2		1
DF RESEARCH AND DEVELOPMENT	64	33	8	2		12	10				
TEACHING	695	655	17	6		-4	1 5	-	y		4
PRODUCTION AND INSPECTION	4			2			ĺź				-
OTHER	81	36	9	3		21	7	2	2		1
NOT EMPLOYED	125									126	
NO REPORT	60	35	4	1		4	5		1		10
OTHER FIELDS	20,770	5.028	1.553	458	578	524	11.074	359	124	979	93
RESEARCH AND DEVELOPMENT (A)	4,848	587	424	57	46	155	3,517	36	19		7
BASIC RESEARCH	517	297	73	9	12	25	96	70	17		2
APPLIED RESEARCH	1,591	219	195	27	19	90	1.018	13	7		2
MANAGEMENT OR ADMINISTRATION (B) -	5,704	473	742	174	295	200	3,723	68	21		8
MANAGEMENT OR ADMINISTRATION											-
UF RESEARCH AND DEVELOPMENT -	2.867	179	450	46	104	123	1,927	24	10		4
PRODUCTION AND INSPECTION	3.851	3,684	17	39	46	8	30	3	14	<del></del>	10
OTHER	2,571	20	112	68	46	10	2,263	34	14		4
NOT EMPLOYED	2,333 979	170	224	102	107	137	1,337	199	53		4
NO REPORT	484	94	34							979	4
	707	74	) <del>) ) </del>	18	38	14	204	19	3		60

<sup>(</sup>A) INCLUDES DEVELOPMENT AND DESIGN. NOT SEPARATELY IDENTIFIED.

(8) INCLUDES MANAGEMENT AND ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

103

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-8.-NUMBER OF SCIENTISTS, BY FIELD: YEARS OF PROFESSIONAL EXPERIENCE, AND TYPE OF EMPLOYER, 1964.

SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE		TYPE OF EMPLOYER									
	TOTAL	EDUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	MILITARY	NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS		ОТНЕК		NO REPORT OF TYPE OF EMPLOYEP
ALL F1ELDS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
YEAR	8:303 34:864 45:249 42:706 26:304 53:778 12:650	3,484 15,154 16,324 12,030 8,075 16,833 4,827	485 3,147 4,617 4,698 2,995 6,786 677	222 1,183 1,617 1,569 941 1,645 295	458 1,276 908 871 793 721 495	244 1,163 1,959 1,962 1,131 1,919 345	2,325 10,302 17,752 18,753 11,125 21,160 2,999	19 135 425 927 722 1,781 268	54 195 253 290 170 396	2,069 1,258 504 270 2,311	105 240 137 97 82 226 370
CHEMISTRY	63,053	13,616	4,004	888	648	1,679	37,659	589	311	3,168	291
1 YEAR	3,291 9,242 10,812 11,218 6,862 17,008 4,620	1,222 2,919 2,355 1,724 1,052 2,603 1,741	129 534 688 814 493 1,212 134	53 145 141 180 94 222 53	140 198 70 33 27 39	78 240 323 349 235 393 56	1,279 4,513 6,836 7,361 4,790 11,106 1,474	4 10 27 64 63 387 34	11 51 48 26 35 90 20	581 300 125 65 929	41 51 24 12 8 22 133
EARTH SCIENCES	17,907	4,023	2,325	658	241	216	8,400	821	87	962	174
1 YEAR	781 2,157 3,399 4,033 2,403 3,800 1,274	328 885 795 589 332 721 372	66 258 394 558 355 620 74	36 110 155 153 74 96 34	33 56 30 24 18 16 64	11 33 47 32 21 55	178 624 1,782 2,412 1,370 1,744 ∠90	3 17 84 233 181 256 47	4 14 16 19 8 19	82 61 28 246	21 27 14 12 15 27 58
METEOROLOGY	5,510	527	1,857	78	2,113	152	94 ر	18	16	140	15
1 YEAR	149 708 941 1,019 938 1,506	29 122 91 79 55 119	14 161 308 330 246 729 69	2 8 12 14 16 22 4	85 329 365 431 525 328 50	2 18 35 35 22 34	10 42 113 113 74 179 16	1 1 2 13	1 2 2 6 4	14	1 3 1  1 6 3
PHYS1CS	26,698	11,611	2,913	83	473	1,031	2, 154	166	25	1,350	106
1 YEAR	1,265 6,507 6,043 4,634 2,332 4,484 1,383	676 3,363 2,445 1,676 838 1,940 673	64 617 701 584 239 604 44	26 21 10 8 17 3	36 181 89 69 22 24 52	40 198 230 233 122 163 25	219 1,056 2,046 1,792 1,033 1,053	1 6 16 23 26 91	1 4		10 24 12 5 3 4
MATHEMATICS	17,411	7,206	1,113	211	277	828	6,935	115	83	562	81
1 YEAR	246 3,262 5,328 3,630 1,670 2,729 546	161 1,562 1,868 1,191 672 1,495 257	12 164 314 279 119 204 21	3 42 56 30 23 53 4	9 83 56 54 28 30 17	6 1 77 2 92 2 05 8 5 1 1 4 1 9	37 1,058 2,511 1,759 706 717 147	5 19 33 15 39 4	12	202 172 50 15	3 25 12 8 2 18 13
AGRICULTURAL SCIENCES "	9,526	2,833	3,295	1,440	47	<del></del>	-	174	30	<del> </del> -	60
1 YEAR	189 1,451 2,008 1,923 1,309 2,337 309	76 422 535 523 413 755 109	506 780 628 388 877 76	23 266 339 323 218 238 33	23 7 3 1 1 8	15 16 21 32	152 275 363 221 295	16 22 38 27 58 13		14 4 4 4 6 8 14 5 5 5 5 2 5 16	2 10 18
810LOCICAL SCIENCES	27,135	15,872	2,916	1,203	790	1,775	2,720	647	20	2 839	171
1 YEAR	708 4,007 5,468 5,128 3,183 7,344 1,297	2,492 3,394 3,032 1,857 4,020	881	162 214 187 146 408	139 156 124 103 208	1 86 334 353 228 539	300 514 652 342 725	5 35 66 111 101 293 36	3: 2: 3 1: 7	8 159 1 54 9 15	25 30 16 13 48
PSYCHOLOGY	16,804	8,162	1,378	1,901	230	1,574	1,362	<del></del>	27		
1 YEAR	337 2,347 3,720 3,952 2,162 3,321 965	1,229 1,891 1,788 1,035	181 261 336 207 299	307 509 468 214 275	70 35 47 23 24	233 406 436 185 215	137 293 394 204 235	29 141 344 222 314	2 5 6 3 6	5 24 8 120 6 113 8 50 4 27 6 190 7 134	13 15 21 11 26

TABLE A-8.-NUMBER OF SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND TYPE OF EMPLOYER, 1964 - CONTINUED

	,										
COTEMPTERS AND TECHNISM				4	TYPE OF	EMPLOYER					
SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	MILITARY	NONPROFIT ORGANIZA- TIONS	ANO	HPLOYCU	OTHER	OBAO?dWB	NO REPORT OF TYPE OF EMPLOYER
STATISTICS	2,843	778	568	122	31	139	1,055	25	38	56	21
1 YEAR	22	14	1		2	1	3	<del> </del>		<b></b>	
5 TO 9	422	161	40	7	15	21	147	1	2	1 19	9
10 TO 14	668 620	177 146	96	28	7	33	297	٤	9	16	2
15 TO 19	411	98	117	23 25	2	37	270	3	11	8	3
20 OR MORE	609	158	203	38	2 2	16	152		5	5	3
NO REPORT	91	24	12	ĩ	1	24 7	l 148 l 38	11	111	11 6	3
ECONOMICS	12,143	5,061	1,274	284	83	465	3, 357	195	207	510	97
1 YEAR	372	180	40	8	15						97
2 TO 4	1,446	799	127	38	15 19	16	61	2	10	37	3
5 TO 9	1,993	969	188	41	6	46 83	312 o24	6	27	52	20
10 TO 14	2,078	823	206	59	9	83	805	18 22	22 38	27	12
20 OR MORE	1,729	746	165	35	10	77	612	27	33	19 20	9 4
NO REPORT	3,720 805	1+285 25'	487	92	7	135	1,292	161	67	222	32
<u> </u>		- 23	61	li	14	25	461	19	10	133	17
SOCIOLOGY	2,703	2,080	137	115	10	160	55	20	21	97	
1 YEAR	35	31	1			1					
2 TO 4	255	216	3	7	3	3	5	2		2	
10 TO 14	609	486	35	30	2	34	17	3	5	11	
15 TO 19 ]	579	450	32	31	3	38	ii		5	15 8	1
20 OR MORE	394 739	306 544	22	ìε		27	7	4	7	2	i
NO REPORT	93	67	41	23	2	47	12	10	4	49	2
LINGUISTICS						5	3	1		10	3
<b>}</b>	1,351	930	72	25	1	100	64	4	10	126	19
1 YEAR	45	27	3	2		1	2				
5 TO 9	210	129	6	5		13	10		2	9 34	1
10 TO 14	316   257	214	15	4	1	36	18	, ,	3	24	5
15 TO 19	140	179 110	19 10	5		21	13	ı	3	15	1
20 OR MORE	285	231	18	3		6	9			1	ī
NO REPORT	93	40	i	íl		9	9	1 1	1	7	5
OTHER FIELOS	20,770	5,023	1,553	458	578	524	11,074			36	6
1 YEAR	363	175					11,017	359	124	979	93
2 TO 4	2,850	175 855	21 166	9	84	3	434	3	7	112	12
5 TO 9	3,745	1,124	264	60 57	160 81	42	1,339	8	14	184	22
10 TO 14	3,575	825	227	86	72	90	2,126	23	24	137	9
15 TO 19	2,671	560	233	67	34	124 86	2,109	54 48	27	45	. 7
NO REPORT	5,896 970	1,285	611	151	40	155	3,125	207	35	39 272	10 15
				18							

		T									
CCICNTIFIC AND TECHNICAL			γ————		AC	ADEMIC RANK		_			NO REPORT
SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	TGTAL	DEAN	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	LECTURER		RESEARCH ASSISTANT	CTHER	OF ACADEMIC RANK
ALL FIELDS	49,595	145	13,086	10,381	11,343	4,183	709	235	3,367	1,337	4.809
PH.O	32,776 2,039 11,035 3,572 16 157	118 1 26	11,492 664 752 124 3 51	8,433 484 1,336 98 1 29	8.078 410 2.599 222 2 32	882 123 2,657 508 2	401 4 256 45	145 49 28 11,	123 37 1,664 1,534	224 10 474 624	2,880 257 1,243 406
CHEMISTRY	8,435	17	1,955	1,532	1,793	559	72	46	769	4	19
PH.O	5.504 127 1.313 1.464 4	3	1,818 27 82 20 	1,349 22 139 19 	1,471 49 216 52 1	179 8 249 121 1	45 1 13 13	33 9 2 2 2	33 2 180 551 1	961 139 1 280 538 	731 423 8 149 148 1
EARTH SCIENCES	2 • 784	3	645	539	615	244	40	3	456	14	225
PH.O	1,660 1 808 308 2 5	2 1 1 	608  27 10 	467  68 4 	403 1 190 18 3	36  187 20  1	18  20 2 	. 2	13  231 210 1	3 6 5	77 39 1
METEOROLOGY	237		58	56	40	20	9	2	16	4	32
PH.O	156  66 14 1		51  5 1 1	49  6 1	13	1 17 2	5 4 	2	1 8 7	2 2	20 11 1
PHYSICS	6+406	Q.	1,538	1,196	1,392	741	127	56	922	35	390
PH.O	3,822 4 1,795 765 3 17	7   	1,420 2 99 14 	973 1 207 13	956 1 395 33 1 6	117  470 153 	77 	45 	12 -443 466 	12 18.	211 124 53 1
HATHEMATICS	5,241	10	1,107	902	1,374	840	92	9	356	73	478
PH.D	2,849  2,198 174 1	2	984 	631  258 11 	767  585 19 	151 637 50 	44 43 4 	5 3 1	19  287 49 	53 7	227  228 19 
AGRICULTURAL SCIENCES -	1,498	4	482	358	288	79	6	3	41	17	220
PH.D.	948 2 430 115 1	3 	397  69 15 	259 1 80 17 	176 103 9	57 18	5  1 	1 1 1	1 1 24 15	10 5	102 
BIOLOGICAL SCIENCES	10,148	18	2,916	2,431	2,267	616	80	93	471	74	1,182
PH.D	6,745 1,888 1,174 320 3	15 1 2	2,201 629 74 6 1	1+821 457 136 11 1	1,645 355 243 19	209 115 254 37 1	57 2 20 1	45 40 7 1	25 33 237 176	20 9 29 16	707 247 172 53
PSYCHOLOGY	4,874	21	1,309	1,241	1,334	264	107	5	67	24	502
PH.D	4,216 9 603 41 5	19 2	1,270 2 30 5 	1,173 1 65 2 	1,155 3 170 6 	97  153 13 	75  29 2  1	5 	4 1 58 4 	13 9 2	405 2 87 7 
PH.D	600		174	143	143	42	14		24	5	55
PROFESSIONAL MEDICAL MASTER'S	158 16 		158  13 3 	20 3 2	102  40 1 	36 36 3	 7 1 		2 20 2	3 1	33 19 2 1

TABLE A-9.—NUMBER OF UNIVERSITY AND COLLEGE TEACHERS. BY FIELD. HIGHEST DEGREE, AND ACADEMIC RANK. 1964—CONTINUED

COLONIA DE LA COLONIA DE L					AC	ADEMIC RANK					NO REPORT
SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	TOTAL	OEAN	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	LECTURER	RESEARCH ASSOCIATE	RESEARCH ASSISTANT	OTHER	OF ACADENIC RANK
ECONOMICS	4,254	42	1,391	921	993	285	68	6	87	32	429
PH.D	3,024 1	34	1,247	762 1	618	25	16	2	4	7	309
MASTER'S	1,095	8	117 17	143 9	330 40	238 21	48 4	3 1	79 4	23 1	106
NO REPORT	26		10	6	5	1				1	3
SOCIOLOGY	1,797	4	636	432	396	57	45	3	2	1	221
PROFESSIONAL MEDICAL	1,563	4	2	384	334 1	24	34 1	2			182
MASTER'S	214		28 6	46 1	59 2	32 1	10	1	2	1	35
NO REPORT	3		1	1							1
LINGUISTICS	784		211	162	189	107	5	3	30	12	65
PH.D	560		194	144	149	17	3	1	2	4	46
MASTER*S	169 29			13 1	32 3	75 12	2	1 1	22 5	4	16 3
NO REPORT	26		13	4	5	3			1		
OTHER FIELDS	2,537	17	664	468	519	329	44	6	126	85	279
PH.D	1,306	14	545 2	303 1	275	19	16	2	7	18	107
MASTER'S	1,012	3	102 13	155 6	223 20	252 57	23 5	3 1	73 45	42 25	136
NO REPORT	10		2	3	1	1			1		3

NOTE - INCLUDES SCIENTISTS REPORTING COLLEGE AND UNIVERSITY TEACHING AS A FIRST OR SECOND WORK ACTIVITY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

					WORK AC	TIVITY	-				
SCIENTIFIC AND TECHNICAL FIELD  AND AGE	TDTAL	RESEAR	CH AND DEV	ELOPMENT	MANAGEM ADMINIS			PRODUCTION		NOT EMPLOYED	NO REPORT OF WORK
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (8)	OF R+D	TEACHING	AND INSPECTION	OTHER		ACTIVITY
ALL FIELDS	223,854	77,699	35•781	30,280	46,255	24,568	41,209	16,582	26,301	9•617	6,191
20-24	8,247 34,102 39,876 40,148 5,831 24,726 16,921 11,308 6,966 3,428 1,992 289	3, 251 16, 599 17, 950 15, 001 11, 121 6, 158 3, 568 2, 116 1, 178 493 181 83	1,988 8,749 8,529 6,639 4,519 2,397 1,291 799 491 242 101 36	724 4,925 6,646 6:225 5,071 2,889 1,805 1,085 582 223 66	262 2,222 4,807 8,381 10,088 8,242 5,851 3,665 1,974 544 160	80 811 2,432 4:686 5,733 4,501 3,024 1,882 1,020 282 93 24	1,389 5,207 7,364 7:114 6,374 4,585 3,436 2,711 1,883 869 202 75	749 3,183 3,040 2:864 2:523 1:800 1:221 720 370 71 33 8	753 3,033 4,639 5,280 4,460 3,075 2,096 1,413 846 441 232 33	1,370 2,878 1,317 727 464 266 183 206 351 784 1,054	473 980 779 781 801 600 566 477 364 226 130
CHEMISTRY	63,053	27, 645	12,472	10,607	13,125	8,740	5,798	9,485	2,242	3,168	1,590
20-24	3,841 10,355 10,157 10,357 9,687 7,294 4,918 2,994 1,878 943 594	1,725 5,981 5,918 5,102 3,910 2,386 1,320 723 393 123 44 20	1,116 3,289 2,769 2,107 1,445 871 412 233 138 66 18	354 1,648 2,242 2,132 1,779 1,095 683 389 205 49 22	68 358 981 2,188 2,984 2,727 1,928 1,115 578 139 52	18 173 665 1,526 2,068 1,849 1,246 702 365 83 40	487 802 1,014 868 790 562 436 347 307 154 28	481 1,672 1,522 1,615 1,:53 1,136 813 477 240 51 22	250 326 236 260 270 273 157 135 87 37		207 262 179 168 173 155 160 113 99 51 22
EARTH SCIENCES	17,907	2.826	1,696	1,112	2,614	964	2,545	939	7,392	962	629
20-24	658 2,141 3,317 3,752 3,098 1,799 1,206 876 532 332 177	112 563 658 553 396 217 136 97 45 33 15	82 386 399 303 220 110 83 55 25 22 10	30 173 255 243 175 107 51 42 20 11	14 85 184 484 622 464 332 240 136 38 11	2 28 70 174 228 173 133 84 51 14	532 399 399 250 166 140 93 47	21 129 227 229 164 68 57 29 9 5	152 640 1,509 1,927 1,379 730 453 302 165 89 40	245 129 78 51 24 22 27 53 93	61 122 78 82 87 46 40 41 31 27 13
METEOROLOGY	5,510	1,043	519	505	1,265	346	222	68	2,596	140	176
20-24	118 677 968 892 1,166 978 384 228 62 25 11	32 213 243 191 174 108 46 17 13 5	17 122 138 91 77 37 21 9 5	12 83 101 97 96 71 25 8 8	33 103 154 398 346 110 93 22 5	9 34 52 113 91 27 18 2	34 34 57 44 17	3 11 10 16 5 10 2	65 352 541 483 453 409 179 90 18 4	26 13 3 32 32 5 6	10 20 23 17 36 34 17 10 4 4
PHYSICS	26,698	14,345	8,040	4,244	4,018	3+C83	5•368	221	775	1,350	621
20-24	1,568 6,686 5,730 4,409 3,528 1,793 1,191 865 604 224 85	726 4,414 3,714 2,409 1,592 697 366 214 141 47 17	493 2,704 2,116 1,269 774 330 153 90 72 23 11	139 1,105 1,072 802 580 245 144 86 49 18	28 246 524 860 962 564 362 262 164 35	11 138 389 691 785 470 249 200 113 27	963 1,027 847 738 402 363 300 232 101	14 55 55 38 28 12 8 6 4	46 J85 135 106 106 62 53 39 26 5	642 179 81 44 18 16 12 17 29	96 181 96 68 58 38 23 32 20 5 4
MATHEMATICS	17,411	5,587	1,659	2,149	3,444	1,916	5,023	1,080	1.340	562	375
20-24	343 3,703 4,304 3,439 2,252 1,301 882 601 359 165 56	130 1,556 1,657 1,063 612 268 165 77 42 7 6	59 546 458 272 157 69 41 28 20 3 6	45 498 571 446 294 133 103 35 20 3	14 251 712 965 663 374 230 132 75 13	8 129 384 578 390 209 122 58 30	929 1,059 820 623 475 389 322 201 99	19 329 325 200 115 45 26 13 6	50 338 338 254 155 100 48 31 17	209 145 74 34 18 4 6 3 29	21 81 68 63 50 21 20 20 15 13 3

					HORK AC	TIVITY	<u> </u>				
SCIENTIFIC AND TECHNICAL FIELO AND AGE	TOTAL	RESEAR	CH ANO DEV	ELOPMENT	MANAGEM ADMINIS		TEACH1NG	PRODUCTION ANO	OTHER	NOT EHPLOYED	NO REPORT OF WORK ACTIVITY
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D		INSPECTION			
AGRICULTURAL SCIENCES	9,526	2,729	847	1.812	4,287	1+136	893	257	835	160	365
20-24	133 1+279	34 398	20 150	13 235	49 542	9 58	6 63	2 47	24 127	8 38	10 64
30-34	1.700	575 435	21 1 145	344 326	690 692	121 148	•	57 45	153 138	-	55 51
0-44	1+621	504	148	350	737	225	162	43	126	4	45
,5-49	1+241 874	316 178	73 43	235 130	597 472	217 152	173 89	20 24	95 73	3	37 38
55-59	590	123	34 12	88 52	310 132	121 55	57 30	10	49 26	7 6	34 14
50-64	280 133	66 33	7	26	38	22	19		13	19	11
70 AND OVER	55 46	12	1 3	9	7 21	3 5	7 6	2	8	23	3 د
BIOLOGICAL SCIENCES	27,135	10,980	7,368	3,531	4,110	2,492	7,785	348	2.087	839	986
20-24	351	149	120	27	7	5		8	19	47	9
25-29	2,800 4,513	1,260	982 1+668	265 654	129 295	56 152		58 78	232 319	1	83 117
35-39	5,347 4,514	2,608 1,967	1,751 1,215	838 731	588 731	367 493	1,513	60 52	345 301		138
45-49	3,332	1,073	664	404	780	493	1.015	38	288	20	118 117
50-54	2,436	666 460	407 267	251 191	669 475	398 266		27 20	211 169	11	97
60-64	1+160 531	256 132	158 8 <b>3</b>	98 49	292 107	181 63	381 155	7	120 55		80 57
70 AND OVER	247 77	52 25	37 16	15	25 12	13 5	24		24		25 4
NO REPORT	16,804	4,108	1,397	2,595	2,849	1,079	+==	11	5,148		360
20-24	35	14	10	4	3	2			7 302		1 18
25-29	1.220	505 1.026	233 387	264 601	270	37 120	629	1	774	102	36
35-39	3,739	1.015 726	357 212	631 491	632 684	261 266		3	1,150		57 65
45-49	2,047	341	94	235	469 373	172 112	473	3	677 516		41
50-54	1,493	216 149	38 28	174 120	205	63	246	2	326	23	31
60-64	589 290	70 32	22	47 22	107	35			177		30 17
70 AND OVER	237	8	4 2	3 3	9 2	3	II.		42	•	15
NO REPORT	2+843	854	170	552	694	346	<u> </u>	374	289	<b>‡</b>	82
20-24	22	5	2	2	1		7	5	1		14
25-29	377 572	201	35 40	96 129	90	17 52		54 71	61	14	17
35-39	543 462	1.5 126	28 27	125	136 125	72 59		67	55		13
45-49	379	85	15	54	128	59	64	57 28	35 15	4	6
50-54	228	52 32	11 5	35 22	85 57	38	24	18	10	2	8
60-64	80 16	12	3	9	33	15		7	5		2
70 AND OVER	iž	4	3	1	2	2			1	1	2
ECONOMICS	12,143	1,927	584	1,296	3,534	1.288	3,469	1,215	1,091	+-	397
20-24	148	30 275	11 92	19 175	11 113	28	23 280	24 212	18 121		7 42
30-34	1,905	452	143	297	339	129	607	227 219	197 161	44	39 54
35-39	1,934 2,151	352 306	108 87	234	554 735	188	642	223	157	25	63
45-49	1,680	194	56 33	133 104	681 497	192		139 69	149		40
55-59	835	75	26	47	337	142	239	58 31	70	13	43
60-64	538 353	49	12	36 29	173 72		115	9	33	65	16
70 AND OVER NO REPORT	238	8 5	2	6 4	19			3 1	17	148	19
SOCIOLOGY	2,703	593	380	209	440	247	1,406	9	92	97	66
20-24	- 6	1	1 22				. 2		1	1	
25-29	92	112	22 84	27	5 44		175	2	11	9	1 4
35-39	513 517	154 113	96 70	58 41	63 99	38	256	1 2	16		12
40-44	414	73	45	27	84	46	231	2	14		
50-54	- 311 - 191	51 23	29 10	13	71 38		:14	2	8	1	1
60-64	144	18	12	6 3	28		50	*****		11	6
70 AND OVER	- 73	8	5	3	2	1	15			37	8
NO REPORT	- 2	1		1	1		2		F	1	<del></del>

TABLE A-10.—NUMBER OF SCIENTISTS, 8Y FIELD. AGE, AND WORK ACTIVITY, 1964---CONTINUED

	-				WORK AC	TIVITY		<del>-</del>			
SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	RESEAR	CH AND DEV	ELOPMENT	MANAGEM ADMINIS			PRODUCTION	57.150	NOT EMPLOYEO	
		TOTAL (A)	8ASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	0F R+0	TEACHING	AND INSPECTION	OTHER		ACTIVITY
LINGUISTICS	1,351	214	132	77	171	64	695	4	81	126	60
20-24	26 162 239 274 215 132 120 92 52 20 13 6	6 34 51 59 27 11 7 9 5 4 1	20 25 40 19 6 3 7 3 2 1	1 14 24 17 7 5 4 2 2 1	9 19 33 45 22 19 15 7 1	5 6 16 17 5 8 4 2 	65 124 135 107 81 79 52 33 10 2	2	1 7 13 15 12 9 7 10 4 1 2	13 34 26 19 16 2 2 3 3 6 2	2 12 6 13 6 7 6 2 3 1 2
20-24	998 3,480 3,298 3,375 3,321 2,336 1,668 1,074 683 311 194 27	287 1,217 1,011 825 668 389 227 117 68 24 12	52 168 91 72 68 27 17 7 9 4	78 360 329 276 236 145 79 42 30 8 5	67 341 556 1.032 1.303 1,006 703 386 227 58	25 129 251 575 735 499 315 173 102 23 7	621 724 662 541 349 312 263 161	172 612 466 377 357 275 157 84 60 4	119 352 352 370 352 241 198 152 94 58	257 128 64 43 27 27 33 47 101	49 80 61 45 57 49 44 39 31 16

(A) INCLUDES DEVELOPMENT AND DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT AND ADMINISTRATION, OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

					WORK AC	TIVITY					
SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	RESEAR	CH AND DEV	ELOPMENT	MANAGEM AOMINIS		TEACHING	PRODUCTION		NOT EMPLOYED	
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (8)	OF R+D	TEACHING	ANO INSPECTION	OTHER		ACTIVITY
ALL FIELDS	223,854	77,699	35,781	30,290	46,255	24,568	41,209	16,582	26,301	9,617	6,191
YEAR	8,303 34,864 45,249 42,706 26,304 53,778 12,650	3,983 36,815 19,541 15,059 7,208 11,019 4,074	2,371 9,169 8,487 6,049 2,747 4,215 2,743	1,115 5,225 7,714 6,612 3,365 5,223 1,026	265 2,148 5,747 9,936 7,921 18,583 1,655	108 837 2,901 5,537 4,269 10,177 739	1,364 7,025 9,072 7,246 4,796 10,180 1,526	736 2,558 3,615 3,271 1,972 3,756 674	797 3,434 5,221 5,879 3,544 6,092 1,334	907 2,069 1,258 504 270 2,311 2,298	251 815 795 811 593 1,837 1,089
CHEMISTRY	63,053	27,645	12,472	10,607	13,125	8,740	5,798	9,485	2,242	3,168	1,590
L YEAR	3,291 9,242 10,612 11,213 6,862 17,008 4,620	1,869 5,547 6,097 5,257 2,583 4,345 1,947	1,111 3,078 2,669 1,911 900 1,414 1,389	514 1,628 2,391 2,337 1,171 2,154 412	68 323 1,111 2,616 2,146 6,359 502	28 165 776 1,858 1,441 4,185 287	372 757 1,122 833 576 1,549 309	421 1,353 1,781 1,880 1,162 2,502 386	138 294 250 323 210 813 214	334 581 300 125 65 929 834	89 187 151 184 120 511 348
EARTH SCIENCES	17,907	2,826	1,696	1,112	2,614	964	2,545	939	7,392	962	629
1 YEAR	781 2,157 3,399 4,093 2,403 3,800 1,274	192 593 624 564 270 412 171	115 418 346 298 144 239	75 169 273 264 124 171 35	22 77 212 587 554 1,055	7 32 78 225 181 411 30	491 548 424 257 506	44 124 255 242 107 118 49	207 661 1,615 2,121 1,131 1,328 329	101 133 82 61 28 246 311	44 78 63 94 56 135
METEOROLOGY	5,510	1,043	519	505	1,265	346	222	68	2,596	140	176
1 YEAR	149 708 941 1,019 988 1,506	42 195 252 223 107 182 42	27 110 130 110 39 77 26	14 76 117 111 66 105	48 128 184 304 560 37	1 8 38 61 59 169	28 41 43 35 66	3 12 12 12 11 13 5	88 389 475 521 480 574 69	17 13 14 21 52	5 19 20 22 30 59 21
PHY 51CS	26,698	14,345	8,040	4,244	4,018	3,083	5,368	221	775	1,350	621
L YEAR	4,634	3,843 i 2,495 i 1,034	548 2,597 2,016 1,252 478 626 523	138 1,048 1,229 841 375 505	16 223 586 972 683 1,476	122 448	1,2/3 1,163 832 497 1,244	11 49 53 50 27 26 5	31 161 140 117 78 196	431 174 41 27 86	36 136 84 77 36 105 147
MATHEMATICS	17,411	5,587	1,659	2,147	3,444	1,916	5,043	1,030	1,340	562	375
1 YEAR	246 3,262 5,328 3,630 1,670 2,729 546	127 1,294 2,067 1,139 399 428 142	85 513 477 257 113 140 74	31 396 754 519 199 218 32	3 182 812 1,059 531 779 78	1 94 434 623 294 428 42	906 1,304 861 495 1,181	10 226 480 205 62 66 31	10 315 412 266 133 163 41	202 172 50 15 47	5 77 81 59 35 65 53
AGRICULTURAL SCIENCES	9,526	2,729	847	1,812	4,287	1,136	893	257	835	160	365
1 YEAR	189 1,451 2,008 1,923 1,309 2,337 309	74 496 662 55 353 477 98	27 202 225 159 82 112 40	47 273 438 394 251 354	35 552 846 900 647 1,197 110	69 158 208 225 443 27	106 108 173 145 259	13 54 52 59 28 45 6	27 143 166 160 106 196	34 26 14 5	5 66 68 53 40 112 21
BIOLOGICAL SCIFNCES	27,135	10,980	7,368	3,531	4,110	2,492	7,785	348	2,087	839	986
1 YEAR	708 4,007 5,468 5,128 3,183 7,344 1,297	344 1,994 2,641 2,345 1,195 1,986 475	268 1,504 1,822 1,521 715 1,194 344	75 474 803 801 468 780 130	26 177 449 735 626 1,930 167	15 102 245 462 397 1,168 103	1,129 1,650 1,472 956 2,147	14 79 74 66 30 72 13	81 293 349 331 239 679	251 159 54 15 149	21 84 146 125 122 381 107
PSYCHOLOGY	16,804	4,108	1,397	2,595	2,849	1,079	3,670	11	5,148	658	360
1 YEAR	337 2,347 3,720 3,952 2,162 3,321 965	135 875 1,192 892 394 422 198	75 358 376 270 108 130 80	59 499 773 594 271 285 114	12 132 424 790 526 822 143	9 74 172 307 191 272 54	515 830 794 486 808	1 2 3 1 4	76 668 1,106 1,360 689 972 277	120 113 50 27 190	36 53 63 39 103 61

TABLE A-11.-NUMBER OF SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND WORK ACTIVITY, 1964 - CONTINUED

					WORK AC	TIVITY			- N		
SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	RE SEA	CH AND DEV	ELOPMENT	MANAGEN AOMINIS	ENT OR TRATION		PRODUCTION		NOT EMPLOYED	
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (A)	OF R+D	TEACHING	INSFECTION	OTHER		ALTIVITY
STATISTICS	2,843	854	170	552	694	346	454	374	289	66	82
1 YEAR	22 422 663 620 411 609 91	8 164 254 175 109 118 26	5 41 45 30 21 24	2 101 166 117 72 76 18	3 32 99 179 122 236 23	1 18 57 36 60 112	8 )1 120 92 61 102	1 52 93 90 56 75	1 47 74 64 49	5 11	17 12 12 22 10
ECONOMICS	12,143	1,927	584	1,276	3,534	1,288	3,469	1,215	1,091	510	397
1 YEAR	372 1,446 1,993 2,078 1,729 3,720 805	110 376 430 332 202 357 120	47 117 128 76 57 112 47	63 252 291 243 141 236 70	29 124 373 678 621 1,515	10 41 143 258 235 546 55	110 558 688 574 537 857	38 153 251 239 171 296 67	38 144 180 188 133 335 73	37 52 27 19 20 222 133	10 39 44 48 45 138 73
SOCIOLOGY	2,703	593	380	209	440	247	1,406	9	92	97	66
1 YEAR	35 255 608 579 394 739 93	7 77 181 137 64 105 22	7 60 121 73 38 63 18	17 58 64 25 41	1 18 68 103 80 155 15	1 9 45 61 45 78 8	23 134 312 307 227 368 35	1 1 1 4 1	1 9 24 15 8 30 5	2 11 15 8 2 49 10	1 5 7 8 9 31 5
LINGUISTICS	1,351	214	132	77	171	64	695	4	81	126	60
1 YEAR	45 210 316 257 140 285 98	8 51 55 47 15 25 13	3 34 29 26 10 19	5 17 24 20 4 6	2 14 31 40 23 54 7	1 6 8 18 9 19	22 90 172 132 84 169 26	1 1 1 	3 9 23 10 14 18 4	9 34 24 15 1 7 36	1 11 10 12 3 11
OTHER FIELOS	20,770	4,848	517	1,591	5,704	2,867	3,851	2,571	2,333	979	484
1 YEAR	863 2,850 3,945 3,575 2,671 5,896 970	307 939 1,223 898 498 811 172	53 137 103 66 42 65 51	91 275 397 307 178 292 51	44 246 608 1,093 1,058 2,445 210	21 97 299 588 580 1,205 77	94 667 954 659 440 924 113	181 453 560 423 313 537 104	96 301 407 403 274 743 109	112 184 137 45 39 272 190	29 60 56 54 49 164 72

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.



112

#### TABLE A-12.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, HIGHEST DEGREE, AND TYPE OF EMPLOYER, 1964

				TY	PE OF EMPLO	YER			
SCIENTIFIC AND TECHNICAL FIELO AND HIGHEST DEGREE	TOTAL	EDUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	NONPROFIT ORGANIZA- TIONS	INOUSTRY AND BUSINESS	SELF- EMPLOYED	OTHER	NG REPORT OF TYPE OF EMPLOYER
ALL FIELDS	11,000	9,600	11,000	9,000	12,000	12,000	15•000	11,000	11,000
PH.D	12,000 15,500 10,000 10,000 10,300 10,800	10,500 15,000 7,700 6,600 8,300 9,000	12,900 17,000 10,900 10,000 9,800 10,000	10,900 16,100 3,400 7,800 9,200 9,100	13,000 16,000 10,400 9,900 10,000	15,000 18,000 12,000 10,500 11,000 11,500	18,000 20,000 15,000 12,000 14,000	12:200 17:000 10:300 9:900	9;200 10;200
CHEMISTRY	11,000	9,300	10,900	8,700	11,000	11,700	15,000	10,900	12:000
PH.D	13.000 13,000 10,600 9,900 10,000	10,000 13,000 7,400 6,700	12,900 10,600 9,800	9,100 7,800	12,600 12,500 9,600 7,900	14,000  11,200 10,000 10,000 10,500	15,000 15,000 13,000	12,000 11,000 9,600	
EARTH SCIENCES	10,300	8,800	11,000	8,700	10,000	11,000	12,000	9,600	
PH.J	9,700 10,600 11,500 10,800	9,900  7,200 6,506 	12,100  10,600 10,600 10,300	8,500 1,500	12,000 9,200 8,300	13,500 	15,000 12,000	9,600	
MêTEOROLOGY	10,600	10,500	10,600	10,000	12.100	11,100			
PH.D	13,800  11,700 10,300 9,500 9,800	9:000 7:300	14,500  11,800 10,300 9,500 9,500	9,000	15.500	15,600  12,000 10,600 10,000 11,000			
PHYSICS	12,000	9,600	12,000	9,100	13,000	13,500	15,000		
PH.D —	13,500  10,500 10,000 11,700 11,500	8,000 7,000	14,100  11,700 10,300	6,500	14,400 	16,000 	14,000		
MATHEMATICS	11,000	8,700	12,100	9,500	14,000	13,000	20,000	11,500	
PH.D	12,000 10,200 11,500 11,500 12,000	10,300  7,200 7,700  8,800	16,000  12,100 10,600 	8,900 8,500	17,700 14,200 12,000	17,000 13,000 12,000 12,000 12,700	16,000	11,600	
AGRICULTURAL SCIENCES	9,200	10,200	9,300	7,300	10,500	9,000	9,000	10,000	10,100
PH.D	11,300  8,800 8,400 9,500 8,000	8,800 8,300	9,290 8,700	7,500 7,200	12,000	12,000 9,000 8,400	8,400		
BIOLOGICAL SCIENCES	10,700	10,000	11,000	9,900	12,800	12,500	18,000	11,000	11,500
PH.D	11,200 16,000 8,000 7,700 10,000	10,500 15,000 7,300 5,900  9,500	12,100 17,200 9,000 9,000	11,300 16,300 8,000 7,900	12,800 16,100 8,000 6,600	14,000 18,000 10,000 9,500	17,500 20,000	11:300	12,000
PSYCHOLOGY	10,300	9,700	12,000	9,400	10,300	14,100	17,000	10,400	10,400
PH.D	11,000 15,500 8,900 9,900	10,000 8,500 7,800	12,200  10,600 12,000	8,200 9,100	8,400 9,000	15,900 12,000 13,500	16,000	9,200	8,800

#### TABLE A-12 -MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS. 8Y FIELD, HIGHEST DEGREE, AND TYPE OF EMPLOYER, 1964-CONTINUED

				TY	PE OF EMPLO	YER			
SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	TOTAL	EDUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF- CBYOJ9MB	OTHER	NO REPORT OF TYPE O EMPLOYER
STATISTICS	12,000	10,400	13,000	9,900	12,000	12,000		10,500	
PH.D	13,000	11,000	15,000		14,000	15.000			
PROFESSIONAL MEDICAL									
MASTER'S	11.500	8,000	13,500	9,500 9,600	11,600	12,000			
LESS THAN BACHELOR'S	10,600			~~~~					
NO REPORT	12,000							******	
ECONOMICS	12,000	10,100	13,700	11,700	15,000	14,400	20,000	14,300	14+000
PH.D	12,100	11,000	14,800	15,000	16,500	18,900		15,000	
PROFESSIONAL MEDICAL		8.000	12,600	10,500	12,500	13,100	18,000	12,500	
MASTER'S	11,000	8,000	12,500	10,000	14,300	14,000	16,000	12,500	
FSS THAN RACHEIOR®S	16,700					17,000			
NO REPORT	13,000	10,800				15,000			
SOCIOLOGY	10,100	10,000	12,900	10,700	12,000	14.000			
PH.O	10,400	10,000	13,600	11,500	12,000				
PROFESSIONAL MEDICAL	8,900	7 (00	11 700	9.800	11,000				
MASTER'S	12.000	7,600	11,700	7,500	11,000			****	
FECC TUAN RACHELORIS									
NO REPORT									
LINGUISTICS	9,000	9,000	10,700		5,000	12,000			
PH.O	10,000	10,000							
PROFESSIONAL MEDICAL			30.000			10,000			
MASTER'S	7,100	6,900 6,300	10,000		4,000	10,000			
FESS THAN BACHELOR'S									
NO REPORT	9,500	9,500							
OTHER FIELOS	11,100	8,300	12,100	10,000	13,200	12,000	15+000	10,000	
PH.O	13,500	10,900	15,600	12,000	16,500	16,400			
PROFESSIONAL MEDICAL					12.000	13.000	17.000	10 500	
MASTER'S	10,800	7,600 6,200	13,000	9,500	13,000	13,000	17,000	9,000	
FESS THAN BACHFLOR'S	10,600		11,000	9,500	10,400	12,000	15,000	71000	
NO REPORT	12,000					12,100			

NOTE- NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE-NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

### TABLE A-13.-MEDIAN ANNUAL SALARIES OF FULE-TIME EMPLOYED CIVILIAN SCIENTESTS, 8Y FIELD, AGE, AND TYPE OF EMPLOYER, 1964

				TY	PE OF EMPLO	YER			
SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEOERAL GOVERN- MENT	OTHER GOVERN- MENT	NONPROPIT ORGANIZA- TIONS	INDUSTRY ANO BUSINESS	SELF- EMPLOYEO	OTHER	NU REPORT OF TYPE OF EMPLOYER
ALL FIELOS	11,000	9,600	11,000	9,000	12,000	12+000	15,000	11,000	11:000
20-24	7,000 8,000 9,500 11,000 12,100 13,300 13,400 13,300 12,500 12,500 9,100	5,200 7,000 8,200 9,600 10,600 11,500 11,900 12,000 12,000 10,000 8,200	7,000 8,000 9,500 10,600 12,100 13,000 13,700 14,400 14,400 9,000	5,800 6,400 7,800 9,100 9,900 10,000 10,200 11,000	5,700 8,300 10,000 12,500 14,000 15,500 15,600 15,600 13,700	7,200 8,700 10,800 12,200 13,700 15,000 16,000 15,500 13,500 13,000 11,500	9,000 12,000 15;000 15;000 20,000 16,000 15,000 15;000	7,500 9,500 11,000 12,100 13,000 13,000 14,000	7,800 9,500 11,600 12,000 11,800 15,600
CHEMISTRY	11,000	9,300	10,900	8,700	11,000	11,700	15; 000	10,900	12+000
20-24	13,700 14,000 13,700	5,200 6,800 12,000 11,000 12,000 11,500 11,300 11,800	7,000 8,0°0 9,600 10,600 12,000 12,100 12,900 13,700 14,000	6,200 6,300 7,900 9,200 9,900 11,000 9,600 10,400	5,400 7,500 9,500 11,000 12,900 13,000 14,000 13,000	7,100 8,300 10,400 11,900 13,000 14,300 14,800 14,600 15,000 12,000 13,600	13; 000 14; 400 15; 030 20; 000 17; 000	7,500 10,000 10,000 12,000 12,000	
EARTH SCIENCES	10,300	8,800	11,000	8,700	10,000	11,000	12+000	9,600	
20-24	11,600 12,500 14,000	4,900 6,500 7,600 8,600 9,600 10,300 11,400 12,000 13,000	7,500 8,700 10,500 11,300 12,100 13,500 13,300 14,000	6,600 7,800 9,200 10,000 10,400	8,000 11,000 11,600	6,900 7,800 9,100 10,800 12,000 14,400 16,000 18,000	10,600 12,000 12,000 13,500 15,000		
METEOROLOGY	10,600	10,500	10,600	10,000	12,100	11,000			
20-24	11,000 11,000 11,300 12,000	8,000 8,300 10,300 12,000 12,500	8,200 9,800 10,600 11,000 11,000 11,000 11,600		9,400 10,000 14,700 14,500	8,700 10,400 11,000 12,000 11,300 11,400		4	
PHYSICS	12,000	9,600	12,000	9,100	13,000	13,500	15+000		
20-24	8,800 10,600 13,100 14,500 15,000 14,500 15,000	5,500 7,500 8,600 10,700 11,800 12,500 11,400 11,400	7,500 9,000 10,600 12,500 14,000 15,900 16,500 16,300	8,000	9,000 11,700 14,900 16,500 17,500 17,600 18,500	15,000 16,000			
MATHEMATICS	11,000	8,700	12,100	9,500	14,C00	13,000	206 000	11,500	
20-24	13,700 13,500 13,000	6,400 7,000 8,100 9,300 10,100 10,400 10,200 10,000 10,100	9,000 10,600 12,500 14,100 14,100 15,400	7,600 8,100 9,600 11,400	10,000 12,400 15,900 16,700 18,900 20,000	16,100 17,500			

## TABLE A-13.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTESTS. 8Y FIELD, AGE, AND TYPE OF EMPLOYER 1964 - CONTINUEO

				TY	PE OF EMPLO	YER			
SCIENTIFIC AND TECHNICAL FIELD AND AGE	TOTAL	EDUCA- TIONAL INSTI- TUTIONS	FEOERAL GOVERN- MENT	OYHER GOVERN- MENT	NDNPROFIT ORGANIZA- TIONS	INCUSTRY AND BUSINESS	SELF- EMPL JYED	OTHER	NO REPURT UF TYPE UF EMPLOYER
AGRICULTURAL SCIENCES	9,200	10,200	9,300	7,300	10,500	9,000	9,000	10,000	10,100
20-24	5,800		5,800						
25-20	5,400	6,800	7.000	5,900		6.600			
30-34	7,700	8,500	7,700	6,700		7,800			
35-39	9,000 10,000	9,500 10,500	9,200	7,500 8,000		8,800 10,000			
45-49	10,900	11,600	10,500	9,000		11,000			
50-54	11,600	12,500	11,600	9,900		11,860			
45-59	12,300	12,800 12,400	12,500	9,400 11,000		14,000			
60-64	12,800	2,700	12,870						
70 AND OVER									
NO REPORT	8,700								
BIOLOGICAL SCIENCES	10,700	10,000	11,000	9,900	12,800	12,500	18,000	11,000	11,500
20-24	5,000	4,800			5 500	4 000			
25-29	6,600 8,400	6,400 8,000	7,300	6,100 7,300	5,500 8,500	8,000	12,300	9,000	
30-34	10,400	10,000	10,300	9,800	12,200	12,000	18,000		
40-44	12,000	11,300	12,000	10,800	15,000	14,000	20,000		
45-49	13,000	12,200	12,900	10,500	16,100	15,000 16,000	25,000		
55-59	14,000	13,000	14,500	13,200	18,500	17,000	20.000		
60-64	13,500	12,560	14,500	12,000	17,300	17,500			
65-69	13,000	12,500	14,000	12,000					
70 AND OVER	8,400	7,900							
PSYCHOLOGY	10,300	9,700	12,000	9,400	10,300	14,100	17,000	10,400	10,400
20-24									
25-20	7,500	7,500	8,400	7,100	7,800	10,000			
30-34	9,000	8,500	10,300	8,600	9,100	12,000	14,400	9,300	
35-39	10,300	9,600	11,700	9,600	12,000	15,300	18,000	10,500	
45-49	11,700	10,800	12,900	10,000	11,000	15,800	18; 000	12,000	
50-54	11,800	11,000	12.700	9,900	12,000	17,000	18,000	10,900	
55-59	11,500	11,200 11,500	12,500	10,000	9,700	10,000			
65-69	10,800	10,800							
70 AND OVER	10,000								
STATISTICS	12,000	10,400	13,000	9,900	12,000	12,000	<b> </b>	10,500	
20-24									<b>———</b>
25-29	8,700	8,200	8,900		13 000	8,800			
30-34	10,400	8,500	10,300		12,000	11,000			
35-39	13,000	12,000	14,000			13,200			
45-49	14,000	12,800	14,000		4	14,500			
50-54	- 14,000 - 14,000	12,500	14,800		~~~~	14,600			
60-64	13,000								
65-69									
70 AND CVER									
ECONOMICS	12,000	10,100	13,700	11,700	15,000	14,400	20;000	14,300	14,000
20-24	7,800				4				
25-29	8,400	7-500			11,000			10,500	
30-34	9,700	9,700							
40-44	- 13,000	10,800	14,000	12,700	16,800	15,500		15,600	
45-49		12,000				l			
50-54	15,000	12,500			1	20,500		<b></b>	
60-64	15,000	13,000	16,300			21,000			
65-69	-4,500	13,400			1	1			
70 AND GVER	]		1	1	1			<b></b>	
SOCIOLOGY	10,100	10,000	12,900	10.700	12,000	14,000		4	
20-24									
25-29	7,800	7,800		1				******	
30-34	8,500 9,600	9,500		1	1				
35-39	10,500	10,000	)		12,700	)			
45-49	11,000	10,800	)	1		1		******	
50-54	12,000	12,000		1	l.	_		<b>******</b>	
55-59	11,500	11,000	. 1	.					
65-69	11,800	11,500	1	1				4	
70 ANO OVER				1		1			
NO REPORT		<del>===</del> ===	<del></del>		- <del>1</del>				

# TABLE A-13.MEDIAN A' AL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIE AGE, AND TYPE OF EMPLOYER, 1964 - CONTINUED

				TY	PE OF EMPLO	YER	<del></del>		
SCIENTIFIC AND FECHNICAL FIELD AND AGE	TOTAL	EDUCA- TIUNAL INSTÍ- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	NOMPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF- EMPLOYED	OTHER	NO REPORT OF TYPE OF EMPLOYER
LINGUISTICS	9,000	9,000	10,700		5,000	12,000			
20-24	6,900 7,500 8,500 9,300 10,500 12,000 11,600	7,000 7,300 8,500 9,000 10,000 11,800 11,700 12,600	12,100	10,000	4,500	12,000	15,000	10,000	
OTHER FIELDS	7,200 8,300 9,900 11,900 13,200 14,000 14,100 13,400 14,600 12,600 12,500	5,000 6,100 7,200 8,500 9,600 10,000 10,000 10,000 11,300	9,000 10,300 12,100 13,600 14,100 13,700 15,000	7,400 8,900 9,700 11,100 11,400 10,300	8,700 11,100 14,500 14,200 17,000 17,600	7,400 8,600 10,500 12,900 14,300 15,000 16,000 16,700 14,000	12,700 12,000 18,000 20,000		

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

# TABLE A-14.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, WORK ACTIVITY, AND TYPE OF EMPLOYER, 1964

				-	105 05 5		<del></del>		Τ
SCIENTIFIC AND TECHNICAL FIELD AND				11	PE OF EMPLO	T	,		<u> </u>
HORK ACTIVITY	TOTAL	EDUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	GTHER GOVERN- MENT	NONPROFIT ORGANIZA- TIONS	INOUSTRY AND BUSINESS	SELF- EMPLOYED	OTHER	NO REPORT OF TYPE OF EMPLOYER
ALL FIELDS	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11,000
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH MANAGEMENT OR ADMINISTRATION (B) MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	11,000 - 11,000 - 11,000 - 14,500	10,200 10,000 10,400 14,000	10,600 10,700 10,600 13,000	8,700 9,000 8,500 10,000	11.500 11,000 12,000 15.600	11,400 12,300 11,500 15,500	15,000 14,700 15,000 15,000	10,400 10,000 10,800 13,500	10,700 11,700 10,300 14,100
TEACHING	8,900 9,800 10,500 11,200	8,800 8,700 9,600 10,300	10,000 9,500 10,300 10,600	8,500 7,700 8,900 8,600	12,000 10,000 10,000 12,000	10,500 10,000 11,000 12,000	12,000 16,000 16,000	14.500 8.000 9.900 11.000 12.000	15,000 9,000  10,000 11,500
CHEMISTRY	11,000	9,300	10,900	8•700	11,000	11,700	15.000	10,900	12,000
RESEARCH AND DEVELOPMENT (A)	10,800 11,000 11,000 15,000	9,600 9,500 10,000 14,300	10.600 10.700 10.300 14.200	9,500 9,600 9,500 11,000	10,500 10,500 10,500 14,500	11,000 12,000 11,000 15,000	12:000	10,300 10,800 10,000 13,000	
TEACHING	8,900	14,000 8,900 8,400 10,400 10,500	8,900 9,800 10,000	7,600 8,400 8,600	8:000 10:600 10:000	9,600 11,300 12,000	18,000 12,000 15,000	9,800	
	10,300	8,800	11,000	8,700	10,000	11,000	12,000	9,600	
RESEARCH AND DEVELOPMENT (A)	10,300 - 10,500 - 14,100	9,000 9,000 8,400 13,500	10,800 11,300 10,400 12,900	8,400 8,400 8,500 11,100	10,000 9,900 10,200 15,700	11+000 11+600 11:000 16: 0	15.000		
OF RESFARCH AND DEVELOPMENT TEACHING	8,500	13,200 8,500  7,900	9,500	7,400 8,200	8,400	9,400 10,200	12,000	9,500	
METEOROLOGY		9,300	10,000	10.000		12.000			
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH		10,500 10,000 9,900 10,000 16,000	10,600 11,700 10,500 12,000	10,000	12,100 11,500 11,500 11,600 16,000	11,900 11,900 12,100 11,900 14,900			
OF RESEARCH AND DEVELOPMENT TEACHING	14.500 10.000 9.300 9.800 11.000	1D,200	14,000		16,000	15,000			
PHYSICS	12,000	9,600	12,000	9,100	13 000	12.500		******	
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	12,000 12,000 12,000 17,000	11.000 10,500 12.800 16.200	10.600 11.700 10.300 15.000	6,600	13,000 12,000 12,000 12,600 18,500	13,500 12,600 13,800 12,400 17,600	15,000		
OF RESEARCH AND DEVELOPMENT TEACHING	17.300 8.700 10.000 12.000 13.000	17.400 8.700  9.000 11.000	15,600  9,000 11,900 13,600		19,400	18,000	15:000	+	
MATHEMATICS	11.000	8,700	12,100	9,500		14,500	20.000		
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	11.800 11.000 12.400 15.500	10.500 10.000 11.300 13.000	10,900 10,300 11,700 14,500	9,200	13,100 12,000 14,500 17,300	12,000 12,000 13,200 12,700 16,000	20,000	10.500	
TEACHING	16,000 9,200 10,600 12,000 11,000	14,000 8,100 10,000 10,000 10,500	10,600 10,600 10,600	9+600	18,300 10,900 12,700	16,300 11,400 10,600 12,200 12,000	20.000	**************************************	

# TABLE A-14.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, WORK ACTIVITY, AND TYPE OF EMPLOYER, 1964 - CONTINUED

TOTAL   COURSE   CO										
MGRK ACTIVITY    TOTAL   SOUCH   FORTH   COURT   COURT	SCIENTIFIC AND TECHNICAL FIELD AND				· · · · · ·	PE OF EMPLO	TEK	<del></del>	_	ļ
RESEARCH MO DEVELOPMENT (A) 9-500 10-000 9-500 7-200 9-500 9-500 10-500 10		TOTAL	TIONAL INSTI-	GOVERN-	GOVERN-	ORGANIZA-	ANO		OTHER	OF TYPE OF
### ANACEPRIT ON ADMINISTRATION 18)	AGRICULTURAL SCIENCES	9,200	10,200	9,300	7,300	10,500	9,000	9,000	10,000	10,100
## PAPELED RESEARCH AND OFFICENCE OF THE PAPELED RESEARCH AND OFFICENC							•	,	•	
######################################	APPLIEO RESEARCH	9,500	10,000	9,400	7,200	h	1	İ	1	ļ.
FEACH INC	MANAGEMENT OF ADMINISTRATION	l					!		·	
STARCH AND GEVELOPMENT (A)   10,000   10,000   11,000		9,800	10,000							!
BIOLOGICAL SCIENCES	OTHER	8,800	10,000	9,000	7,000	1		i		
RESEARCH MD GENERALOMENT (A)				8,600	7,000		9,200		·	
SASIC RESEARCH   10,600   10,600   10,600   1,600   1,600   1,2000   1,2000   3,000   1,200   1,2000				11,000	9,900	12,300	12,500	18,000	11,000	11,500
## PAPLEO RESEARCH   11,300   11,300   10,300   2,800   12,900   11,900   13,200   13,200   13,200   13,200   13,200   13,200   13,000   13,000   13,000   14,000   1	8ASIC RESEARCH									
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND OEVELOPMENT (1) OFFICE AND ADMINISTRATION OFFICE AND ADMINISTRATION OFFICE AND ADMINISTRATION OFFICE AND ADMINISTRATION OFFICE AND ADMINISTRATION OFFICE AND ADMINISTRATION OFFICE AND ADMINISTRATION OFFICE AND		11,300	11,600	10,300	9,800					
FEACHING		14,930	15,000	14,100	11,000	17,000	15,300	12,000	13,200	
PRODUCTION AND INSPECTION   6,400   10,000   10,300   7,200   12,000   12,000   12,000   14,000   10,400   10,300   12,0								j.		4
Description		8,400		8,400			1	t.		- <del></del>
RESEARCH AND OEVELOPMENT (A) 10,300 9,700 12,000 9,400 10,300 14,100 17,000 10,400 10,400 10,400 10,400 10,400 10,400 10,400 10,400 10,400 10,400 10,400 10,400 10,400 10,500 12,700 12,										
ASSIC RESEARCH   10,300   10,000   12,000   11,500   13,0	PSYCHOLOGY	10,300	9,700	12,000	9,400			17,000	<del></del>	10,400
10,200   10,000   12,000   11,500   13,000   13,000   9,900   13,000   13			9,600	11,800	8,700	10,500	12,700	12,000	9.600	
MANAGEMENT OR ADMINISTRATION   10,000   12,000   14,000   17,000   12,000   12,000   12,000   14,000   17,000							13,000			
MANAGENERY ON ADMINISTRATION  14,500   13,000   14,500   12,000   17,000	MANAGEMENT OR ADMINISTRATION (B)							:		
FEACHING   10,200   9,300   9,200   1,300   9,100   1,400   17,000   10,500   10,500   10,200   9,800   1,300   9,900   12,000   12,000   10,500   10,500   10,500   10,200   10,200   10,200   10,400   13,000   9,900   12,000   12,000   10,500		14,500	13,000	14,500	12.000	14.000	17.000	i I	:	
10,200   9,400   11,300   9,100   9,300   14,400   17,000   10,500   10,500   10,200   9,800   12,000   12,000   12,000   10,500   10,500   10,500   11,500   11,500   11,500   11,500   11,500   11,500   11,500   11,500   11,500   11,500   12,500   13,500   14,50			9,200		9,100					
RESEARCH AND GEVELOPMENT (A) 11,000 12,000 12,000 12,000 12,000 12,000 10,500	OTHER	, :			1			į		
RESEARCH AND DEVELOPMENT (A) - 11,800 11,000 12,100 9,000 11,900 12,000 - 12,300 1,100 12,300 1,100 12,100 12,100 12,300 - 12,300 1,100 12,100 12,100 12,100 12,300 1,100 13,400 14,400 12,200 13,400 14,400 12,200 13,400 14,400 12,200 13,400 14,400 12,200 13,400 14,400 12,200 13,400 14,40	NU REPORT	10,200	9,800		8,900	-4				
BASIC RESEARCH — 11,500 11,100 12,100 8,400 11,800 12,300 — 1,800 12,500 — 1,800 12,500 — 1,800 12,500 — 1,800 12,500 — 1,800 12,500 — 1,800 12,500 — 1,800 12,500 — 1,800 12,500 — 1,800 12,500 — 1,800 12,500 — 1,800 — 1,800 12,500 — 1,800		12,000	10,400	13,000	9,900	12,000	12,000		10,500	
APPLIED RESEARCH - 12,000 10,400 12,100 8,400 11,800 12,500 - 14,400 MANAGEMENT OR ADMINISTRATION (B) - 14,200 13,500 12,000 12,000 15,000 14,400 - 15,600 - 16,000 12,000 12,000 12,000 - 10,000 12,000 - 12,400 - 12,300 - 13,300								!		
MANAGEMENT OR AOMINISTRATION (B) - 14,200 13,500 14,500 11,000 15,000 14,400 - 15,600	APPLIED RESEARCH				1			i		
TEACHING	MANAGEMENT OR ADMINISTRATION	'		14,500	- 1					
PRODUCTION AND INSPECTION 10,600 12,000 12,000 12,000 12,000 12,000	OF RESEARCH AND DEVELOPMENT TEACHING									
NO REPORT							10,300	1		
RESEARCH AND OEVELOPMENT (A) 11,400 10,700 11,000 9,600 13,600 12,200 - 12,500 15,000 15,000 - 13,000 13,000 12,500 - 13,000 - 13,000 - 13,000 13,000 13,000 13,000 - 13,000					5				1	
RESEARCH AND DEVELOPMENT (A)	ECONOMICS	12,000	10,100	13,700	11,700	15,000		20.000	14,300	
BASIC RESEARCH 11,000 11,300 10,300 15,000 12,500 12,500 13,000 13,000 13,000 17,000 - 13,000 13,000 13,000 13,000 13,000 13,000 13,000 13,000 13,000 16,500 16,500 16,500 16,500 15,900 13,100 17,500 17,000 16,500 16,500 16,500 15,700 13,300 19,000 17,000 18,000 18,000 11,500 11,500 11,500 11,500 10,300 13,300 11,000 13,500 20,000 13,000 12,500 11,000 14,000 13,000 10,300 13,500 20,000 13,000 12,500 11,000 12,900 10,700 12,000 14,000 11,000 10,000 12,900 10,300 11,000			10,700							<del></del>
MANAGEMENT OR AOMINISTRATION (B) 16,100 14,800 15,900 13,100 17,500 17,000 16,500 16,200 14,000 15,700 13,300 19,000 17,000 18,000 17,000 11,500 13,600 13,600 10,300 13,300 19,000 17,000 11,500 13,000 10,300 13,300 13,300 13,500 20,000 13,000 13,500 20,000 13,000 15,000 10,000 12,900 10,700 12,000 14,000 15,000								l i		
OF RESEARCH AND DEVELOPMENT 16,200 14,000 15,700 13,300 19,000 17,000 18,000 11,700 11,700 13,600 11,500 11,500 13,500 20,000 13,000 13,500 20,000 13,000 13,000 13,000 13,000 13,500 20,000 13,000 10,100 10,000 12,900 10,700 12,000 14,000 11,500 10,600 ASIC RESEARCH AND DEVELOPMENT (A) 11,500 11,000 12,100 11,000 12,100 11,500 11,000 12,100 11,500 11,000 12,100	MANAGEMENT OR ADMINISTRATION (B)									
PRODUCTION AND INSPECTION	OF RESEARCH AND DEVELOPMENT				-			1		
OTHER						1	1		1	
SOCIOLOGY				13,300		13,000				
RESEARCH AND DEVELOPMENT (A)		12,500	11,000	14,000			15,000		<del></del>	
BASIC RESEARCH				12,900	10,700	12,000	14,000			
APPLIEO RESEARCH										
MANAGEMENT OR AOMINISTRATION (8) 13,500 13,500 14,100 11,200 14,000 13,500 13,100 14,100 12,000 13,500 13,500 13,100 14,100 12,000 13,500 11,000	APPLIEO RESEARCH				1					
OF RESEARCH AND DEVELOPMENT 13,500 13,100 14,100 12,000 13,500 17,000 13,500 17,000 13,500 17,000 13,500 17,000 13,500 17,000							1			
PRODUCTION AND INSPECTION	OF RESEARCH AND DEVELOPMENT	- 1	- 1				1	- 1		
OTHER	PRODUCTION AND INSPECTION					ľ		1		
119000 109200										
		111000	10,200							

# TABLE A-14.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, WORK ACTIVITY, AND TYPE OF EMPLOYER, 1964 - CONTINUED

			_	TY	PE OF EMPLO	YER			<u> </u>
SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY	LATET	EOUCA- TIONAL INSTI- TUTIONS	FEOERAL GOVERN- MENT	OTHFR GOVERN- MENT	NONPROFIT ORGANIZA- TIONS	INOUSTRY AND BUSINESS	SELF- EMPLOYEO	OTHER	NO REPORT OF TYPE CF EMPLOYER
LINGUISTICS	9,000	9,000	10,700		5,000	12,000			
RESEARCH AND DEVELOPMENT (A)	9,600 10,000 8,400 11,200	10,500 11,000  11,300			4,400	13,000			
OF RESEARCH AND OEVELOPMENT TEACHING	12,000 3,500  8,000 9,000	12,500 8,500  8,200							
OTHER FIELDS	11,100	8,300	12,100	10,000	13,200	12,000	15,000	10,000	
RESEARCH AND DEVELOPMENT (A)	11,000 11,000 11,500 15,000 16,000 7,900 10,000 11,000 12,000	10,700 10,500 11,000 13,600 16,000 7,300  9,600 9,230	11.000 11,000 11,700 14,500 14,900  10,600 10,600 12,500	9,500  11,500 12,000 7,800 9,000 9,100	12,200 12,600 17,000 18,500  9,300	11,000 12,000 11,500 15,900 16,500  10,000 11,400 12,600	14,000	10,000	

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE-TEACHING SALARIES REFLECT A COMPOSITE OF ACADEMIC AND CALENDAR YEAR SALARIES FOR SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION. NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

#### TABLE A-15.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND TYPE OF EMPLOYER, 1964

					PE OF EMPLO				
SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEOERAL GOVERN- MENT	OTHER GOVERN- MEN1	NENPROFIT ORCANIZA— T174S	INOUSTRY ANO BUSINESS	SELF- EHPLOYEO	OTHER	NO REPORT UF TYPE OF EMPLOYER
ALL FIELOS	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,300	11,000
1 YEAR	7,400 8,000 9,600 11,500 12,500 14,000 10,900	7,000 7,500 8,500 10,100 11,000 12,300 9,500	7,000 8,000 9,900 11,500 12,100 14,000 11,300	6,100 6,800 8,200 9,500 9,900 11,000 9,300	7,200 8,400 10,600 13,000 14,400 16,000	7,600 8,600 10,500 12,300 13,800 15,300 11,800	9,000 13,000 15,000 16,000 18,000 15,000	7,200 8,000 9,600 11,500 13,000 14,000	8,400 9,500 11,700 12,500 13,900
CHEMISTRY	11,000	9,300	10,900	8,700	11,000	11,700	15,000	10,900	12+000
1 YEAR	7,200 8,000 9,600 11,400 12,200 14,000	6,600 7,500 8,500 10,100 11,300 12,000 8,300	7,000 3,000 9,800 11,000 12,000 13,700 10,400	6,300 6,600 8,300 9,600 9,500 10,300 7,406	6,400 8,000 10,000 12,000 12,900 14,000 9,300	7,500 8,300 10,000 11,800 12,600 14,500 11,500	12,000	7,500 9,700 10,800 11,200 13,000	
EARTH SCIENCES	10,300	8,800	11,000	8,700	10,000	11,000	12,000	9,600	
1 YEAR	6,900 7,500 9,000 10,800 12,000 14,100 10,000	6,300 7,000 7,900 9,500 10,000 12,000 9,000	6,800 7,700 9,000 11,000 12,000 14,000 11,700	6,000 6,800 8,300 9,600 10,100 12,000	7,700 9,300 11,600 	7,200 7,800 9,200 11,000 13,000 16,400 10,000	10,000 12,000 13,500 15,000		
METEOROLOGY	10,600	10,500	10,600	10,000	12,100	11,000			
1 YEAR	7,500 8,200 9,800 10,600 10,800 12,000	8,000 8,900 11,000 11,500 2,700	8,200 9,800 10,600 10,500 11,600 11,000		10,300 13,800  14,300	8,200 10,200 11,800 11,000 12,000			
PHYS1CS	12,000	9,600	12,000	9,100	13,000	13,500	15,000		
1 YEAR	8,100 8,600 10,700 13,500 14,600 15,200 9,900	7,500 7,800 9,000 11,000 11,700 12,500 8,300	7,400 8,700 10,400 12,800 14,100 16,200 10,300		8,700 9,200 12,000 14,500 16,400 19,000	9,600 9,500 12,000 15,000 16,300 18,000	20,000		
MATHEMATICS	11,000	8,700	12,100	9,500	14,000	13,000	20,000	11,500	
1 YEAR	8,000 8,500 10,500 13,300 14,400 14,000	7,800 7,100 8,000 9,800 10,400 10,800 8,700	8,900 10,300 13,000 14,500 16,200	9,100	10,000 12,000 16,000 18,000 20,000	9,000 9,500 11,700 15,000 17,400 19,500 12,600			
AGRICULTURAL SCIENCES	9,200	10,200	9,300	7 • 300	10,500	9,000	9,000	10,000	10,100
1 YEAR	6,200 6,600 8,000 9,300 10,300 12,000	10,100 11,300 12,700	5,800 6,600 8,000 9,300 10,600 12,300 9,200	6,800 7,600 8,500 10,000	14,000	6,900 7,800 9,000 10,000 12,100 8,300			
BIOLOGICAL SCIENCES	10,700	10,000	11,000	9,900	12,800	12,500	18,000	11,000	11,500
1 YEAR	7,200 7,500 9,200 11,000 12,400 14,100	7,400 8,700 10,500 12,000 13,600	8,400 10,000 11,700 12,300 14,500	6,400 8,200 10,200 11,000 12,100	7,000 10,800 13,000 15,000 17,300	9,000 9,600 11,800 13,000 13,800 17,000 12,000	12,300 15,000 17,000 22,000 24,000	11,500	13,000
PSYCHOLOGY	10,300	<del></del>	<del>                                     </del>	+	<del></del>	14,100	17,000	10,400	10,400
1 YEAR	7,500 - 8,100 - 9,400 - 11,000 - 12,000 - 12,200 - 10,700	8,000 8,900 10,000 11,000 11,900	10,000 10,600 12,500 12,900 13,000	7,800 9,000 10,000 10,100 10,200	8,400 9,500 12,000 12,000 12,500	10,400 12,400 15,000 16,400 18,000 14,700	15,000 19,000 17,000 16,000	9,300 11,400 11,500 11,000	

ERIC\*

### TABLE A-15.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND TYPE OF EMPLOYER, 1964 - CONTINUED

				τγ	PE OF EMPLO	YER			
SCIENTIFIC AND TECHNICAL FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEOERAL GOVERN- MENT	OTHER GOVERN- HENT	NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF- EMPLOYEO	OTHER	NO REPORT GF TYPE OF EMPLOYER
STATISTICS	12,000	10,400	13,000	9,900	12,000	12,000		10,500	
1 YEAR	8,800 10,300 12,000 13,500 14,500 12,000	8,400 9,300 11,100 12,200 13,900	8,700 10,300 12,500 13,600 15,000	8,000	11,500	9,100 11,000 12,400 15,000 15,600 13,400			
ECONOMICS	12,000	10,100	13,700	11,700	15,000	14,400	20,000	14,300	14,000
1 YEAR	7,800 8,400 10,000 12,000 13,500 16,000	7,600 8,000 9,000 10,500 11,500 13,400	8,000 9,000 10,300 12,900 14,000 16,300 16,000	8,300 10,500 12,500 13,000 13,300	10,300 13,200 14,300 17,000 20,000	8,000 8,900 10,800 13,600 15,600 20,000 14,000	24,000	13,200 16,000 20,000	
Saciarak	10,100	10,000	12,900	10,700	12,000	14,000			
1 YEAR	7,500 8,100 9,000 10,200 11,200 12,500 10,500	7,500 8,000 8,600 10,000 10,800 12,100 10,500	10,600	10,400	10,000				
LINGUISTICS	9,000	9,000	10,700		5,000	12,000			***
1 YEAR	6,500 7,100 8,000 9,200 10,000 12,400 10,200	7,200 8,000 9,100 9,900 12,400			4,600				
OTHER FIELDS	11,100	8,300	12,100	10,000	13,200	12+000	15,000	10,000	
1 YEAR	7,400 8,000 9,600 12,000 13,200 14,700 11,400	5,500 6,200 7,200 9,000 9,600 10,800 8,200	8,400 10,300 12,100 13,500 14,500 12,000	7,400 8,300 10,100 11,100 11,300	8,400 10,000 14,100 14,200 17,000	7,500 8,400 10,100 12,600 14,000 16,000	12,000 14,000 18,600	13,000	

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.



TABLE A-16.-MEDIAN ANNUAL SALARIES OF UNIVERSITY AND COLLEGE TEACHERS, BY FIELD, SALARY BASE, AND ACADEMIC RANK, 1964

					AC /	ADEMIC RANK					NO REPORT
SCIENTIFIC AND TECHNICAL FIELD AND SALARY BASE	TOTAL	DEAN	PROFESSOR		ASSISTANT PROFESSOR	INSTRUCTOR	LECTURER		RESEARCH ASSISTANT	OTHER	OF ACADEMIC RANK
ALL FIELOS	9,900	15,300	13,000	10,000	8,200	6,700	8,300	9,500	7,000	8,500	10,006
ACADEMIC YEAR BASE CALENDAR YEAR BASE NO REPORT	9,000 11,300 10,000	15,500	12,000 14,800 13,300	9,400 11,500 10,000	8,000 9,600 8,500	6,500 7,500 7,000	7,500 9,500 10,000	9,500	5,600 7,500	8,300 8,800	9,100 11,300 10,000
CHEMISTRY	9,800		12,600	10,000	8,200	6,800	8,000	9,500	7,000	<b>8,</b> 500	10,000
ACADEMIC YEAR BASE CALENDAR YEAR BASE	8,800 11,300 10,000		11.600 15.000 13.000	9,000 11,700 9,600	7,800 10,000 8,900	6,500 7,400	9,300	9,500		8,800 8,000	9,100 11,000 10,000
EARTH SCIENCES	9,000		12,300	9,300	7,800	6+500	7,200				9,500
ACADEMIC YEAR BASE CALENDAR YEAR BASE NO REPORT	8,700 10,300 9,100		12,000 14,000 13,800	9,100 10,500 9,400	7,600 8,300 7,700	6,400 6,800		******			9,000 10,000
METEOROLOGY	10,800		14,300	11.000	8,600						11,000
ACADEMIC YEAR BASE CALENDAR YEAR BASE NO REPORY	10,500		13,300	10.800							
PH//ICS	9,700		13,500	10,000	8,200	6,500	9,600	8,400			9,900
ACADEMIC YEAR BASE CALENDAR YEAR BASE NO REPORT	9,100 11,000 10,700		13,000 10,000 14,600	9,700 12,200 10,300	8+000 9+900 8+400	6,500 7,400 	7,500 10,000	8.700			9,500 10,000 11,000
MATHEMATICS	8,800		13,000	9,800	8,000	6,500	8,000			8,000	9,000
ACADEMIC YEAR BASE CALENDAR YEAR BASE NO REPORT	8,500 10,000 9,500		12.700 14.500 12.500	9,700 11,000 10,500	8,000 8,700 8,000	6,400 6,800 6,700	7,400				\$,600 9,800 9,100
AGRICULTURAL SCIENCES	10,600		13,000	10,500	8,900	7,000					10,400
ACADEMIC YEAR BASE CALENDAR YEAR BASE NO REPORT	8,000 11,000 10,300		10,800 13,200 12,500	9,000	7,607 9,000	7.200					11,000
BIOLOGICAL SCIENCES	10,800		14,000	10,700	8,700	7,400	8,100	10,000	7,000	7,600	11,000
ACADEMIC YEAR BASE CALENDAR YEAR BASE NO REPORT	8,800 12,000 11,200		11,200 15,600 14,900	9,000 12,000 11,000	7,800 10,000 9,000	6,500 8,200	8,400	10,000	7,300	8,500	9,100 13,000 10,000
PSYCHOLOGY	9,600		12,300	9,800	8,200	7,100	3,800				9,600
ACADEMIC YEAR BASE CALENDAR YEAR BASE	9,000 10,800 9,800		12,000 13,900 12,000	9,300 11,100 9,000	8,000 9,500 8,600	6,800 8,000	7,800 9,500	-4			9,000 10,400 9,300
STATISTICS	10,400		14,100	10,300	8,500	6,500					10,400
ACADEMIC YEAR BASE CALENDAR YEAR BASE	9,500 11,800 10,400		13,900 15,000	10.000	8,100						8,800
ECONOMICS	10,000	15,100	i3.000	10,000	8,400	6,600	7,500				11.000
ACADEMIC YEAR BASE CALENDAR YEAR BASE	9,500 11,500 10,500	15,000		9,700 10,900 10,300	8,000 9,400 8,700	6,500 7,200	7,500				10,400 12,000 11,400
SOCIOLOGY	9,600		12,000	9,600	8,000	6,800	8,500				9,700
ACADEMIC YEAR BASE CALENDAR YEAR BASE NO REPORT	9,000 11,000 9,100		1	9,000 11,400	8,000 9,300	6,600			*		9,100 10,500
LINGUISTICS	9,000		12,800	9,600	8,000	6,500					9,500
ACADEMIC YEAR BASE CALENDAR YEAR BASE NO REPORT	9,000 9,000 8,000		12,500	9,500 10,000	7,800 8,200	6.500					9,100
OTHER FIELDS	9,300		12,500	9,600	8,000	6,500	7,400			8,500	9.000
ACADEMIC YEAR BASE CALENDAR YEAR BASE NO REPORT	8,700 10,500 9,400		14,000	9,500 10,500	7,800 9,000 8,100	6.500 7.200					9,800

NOTE - NO MEDIAN HAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALAR:.



TABLE A-17.-NUMBER OF SCIENTISTS, BY STATE AND FIELD, 1964

						SC	IENTIFIC A	ANO TECHNI	CAL FIEL	.D				
STATE	TOTAL	CHEM- · ISTRY	EARTH SCIENCES	METEOR- OLOGY	PHYSICS	MATHE- MATICS	TURAL	BIOLOGI- CAL SCIENCES	PSY- CHOLOGY	STA- TISTICS	ECONQH- ICS	OLOGY SOC 1-	LINGUIS- TICS	OTHE F1EL
ALL LOCATIONS -	223,854	63,053	17,907	5,510	26,698	17,4:	9,526	27,135	16,804	2,843	12,143	2,703	1.351	20.7
LABAMA	1,887	536	54	64	222	188	174	222	84	19	75	22	5	2
LASKA	452	25	129	70	14	18	99	61	6	2	j 8		2	1
RIZONA	1,768	255	202	88	197	178	186	228	1 35	18	100	21	9	1
RKAN <u>sas</u>	770	168	72	16	33	38	145	140	50	5	44	6	1	i
ALIFORNIA	26 • 645	5,620	2,036	630	4 • 536	3,167	825	2,827	2,321	297	1,171	254	156	2,8
OLORADO GNNECTICUT	3,656 4,149	538 1,424	988 121	156 78	425 610	221	272 60	359	241	35	97	26	10	2
GNNECTICUT Elaware	2,387	1,550	17	10	113	342 42	19	429 94	336 53	37 19	207	51	36	4
IST. OF COL	7, 175	977	666	323	1-043	515	184	669	495	297	149	1 20	1	3
LORIDA	3,708	729	226	200	374	294	294	640	381	43	15	128 38	106 11	5
EORGIA	2,238	485	95	82	154	152	268	475	195	36	i.	26	5	1 1
AWAII	742	105	64	63	30	48	66	161	52	8	i ',	13	25	*
DAHO	814	131	59	24	70	34	226	115	42	ĭ	33	3	3	
LLINOIS	11,537	3,888	496	238	1,253	787	229	1,490	976	151	816	163	81	9
NOIANA	4,628	1,567	194	24	467	375	153	685	353	44	272	67	41	1 3
DWA	2,351	551	76	26	263	166	155 .	456	2 5 0	41	166	43	11	1 1
ANSAS	2,088	447	363	43	136	157	107	328	208	15	105	22	9	i
ENTUCKY	1,545		129	21	96	74	95	. 251	124	11	68	44	5	1
DUISIANA+-	3 • 172	772	986	59	150	142	169	369	97	18	110	26	8	1 2
NINE	589	1 39	31	28	39	45	68	96	47	8	34	9	1	1
ARYLANO	7 • 005		235	251	1,006	680	207	1.512	374	182	192	78	16	. 6
ASSACHUSETTS	9+ 540		358	284	1.978	901	84	1,068	721	92	470	129	63	
ICHIGAN	7,573		297	100	724	510	304	952	712	82	465	137	82	1 7
INNESOTA	3,811		149	51	359	322	259	601	370	58	201	43	13	3
ISSISSIPPI ISSOURI	978 3, 722	140	256 215	15 125	33	243	162	169	٤.	1	35	14	1	١.
ONTANA	797		170	44	304 19	41	159 209	490 131	248	32 8	280 35	73 7	7	3
EBRASKA	1,118	156	83	101	77	114	119	201	97	11	80	16	3	
EVADA	430		72	40	46	21	43	37	22	i	21	2	2	İ
EW HAMPSHIRE	650		50	20	71	46	65	121	30	3	40	14	2	1
EW JERSEY	11.844	5,819	156	87	1.486	775	100	796	684	135	427	61	24	1,2
EW MEXICO	2,023	319	332	72	530	206	159	119	64	24	36	7	l s	! - 'i
EN YORK	24,510	7,015	675	348	3,267	2,143	310	2,965	2,713	400	1,793	372	162	2,3
BRTH CAROL INA	3,118	920	113	87	244	221	231	635	212	55	146	66	12	1
ORTH DAKOTA	460	90	66	16	20	29	87	63	37		27	3		1
:IO	10, 135	4,124	412	104	1,150	625	176	937	729	122	510	128	35	1,0
(LAHOMA	3, 112	726	1,028	75	154	171	102	252	120	24	104	17	4	1 3
REGON	2 • 253	342	163	55	131	121	576	380	179	10	101	39	<b>j 7</b>	1
NNSYLVANIA	12,813	4,898		97	1,572	805	256	1,428	992	133	641	135	59	1,2
IODE ISLAND	895	247	57	7 52	164	66	25	92	64	4	49	18	12	Ι.
OUTH CAROLINA — OUTH DAKOTA —	1 • 203 463	428 60	22 38	19	109 27	71 34	140 93	131 89	46 37	8 5	48	12	2	1 1
ENNESSEE	3,108	1,155	115	42	429	183	162	439		24	28	9	2	1 .
XAS	10,660	2,509	3,231	264	793	601	313	866	168 466	86	100 343	21 67	6 54	1,0
TAH	1,570	293	240	64	113	107	166	231	105	27	48	20	12	1,0
RHONT	343	71	15	3	21	33	35	78	28	1	25	5	2	Ι,
RGINIA	3,741	1,010	182	134	483	413	199	413	241	68	169	36	15	1 3
SHINGTON	3,717	794	221	125	427	297	408	554	275	42	164	38	22	
ST VIRGINIA	1,513	776	67	15	65	52	76	135	45	7	64	18	4	
ISCONSIN	3,912	1,133	174	50	384	336	257	601	295	42	222	68	31	
YOHING	717	84	327	8	13	20	111	67	32	3	14	2		"
UERTO RICO	355	86	19	27	26	14	11	68	19	4	22	5	16	
OREIGN	3,464	2 26	863	465	248	187	128	419	162	41	233	76	147	2



124

0

	7			provert I	,,,		
STATE	Toras		HIGHEST	DEGREE		1.556 5	
	TOTAL	PH.D.	PROFESSIONAL MEDICAL	MASTER*S	BACHELOR'S	BACHELOR'S OEGREE	NO REPOR
ALL LOCATIONS	223,854	79,372	5,925	61,222	72,364		
ALASKA	1,887	547		<del> </del>	127304	2,878	2,093
ARIZONA	452	79	48 3	493	754	26	19
AKKANSAS	1,768	617	18	143 522	191	31	5
CALIFORNIA	770	259	20	223	549 256	43	19
COLORADO	26,645 3,656	9,556	535	7,142	8,716	6	6
DELAWARE	4,149	1,139	62	1,101	1,282	399 42	297
/LOIKLET OF COLUMNTA =	2,387	1,253	92	1,184	1,232	43	30
	7.175	2.814	14 164	434	662	9	36 15
	3,708	1,363	88	2,111	1,910	85	71
	2,238	798	76	1,023 619	1,127	65	42
VANU	742	292	7	196	696 229	32	17
LLINOIS	814 11,537	221	8	241	329	14	4
OHA	4,628	4,345	298	3,301	3,365	119	6
711343	2,351	1,849	77	1,315	1,325	27	109
LNIULKI	2,088	732	71 39	732	585	5	3 <b>4</b> 9
OUISIANA	1,545	531	62	627	661	18	11
*****	3,172	795	57	414	511	16	ii
ANTLAND	589	214	8	919 162	1,340	41	20
**************************************	7,005	2,617	503	1,668	190	11	4
101110Alf	9,540	3,782	405	2,558	2,088	71	58
INNESOTA	7,573 3,811	2,870	142	2,369	2,048	119	93
ISSOURI	978	1,461 280	127	954	1,214	81 29	63
MIANA	3,722	1,298	26	290	356	20	26
BKASKA	797	192	145	1,035	1,166	46	6 32
:VADA	1,118	391	21	259	316	15	9
K HAMPSHIRE	430	109		384 118	283	28	11
	650	265	22	174	182	17	4
7 76/16/16	11,844	4,277	121	3,070	179	6	4
W YORK	2,023	752	17	575	629	143	140
RTH DAKOTA	3,118	9,222	1,051	6,697	6,986	41 298	9
10	460	152	140	710	816	38	256 23
LATIUMA	10,135	3,257	236	156	140	5	43
	3,112	804	38	2,731	3,719	88 j	104
MOILYANIA	2,253	774	46	870 i 562 i	1,317	49	34
20	12,813	4,494	398	3,370	839	22	10
	895	356	11	223	4,309 . 287	134	108
ITH OAKOTA	1,203	403	14	294	462 ,	10	. 8
NESSEE	3,108	168	4	155	125	20 10	10
	10,660	2,514	94	770	982	25	1 20
MUNI	1,570	498	151 41	2,975	4,728	186	106
101 NIA =	343	143	22	423	582	13	13
714 19 1 UN	3,741	1,220	88	100	75	1	ž
O VIRGINIA	3,717	1,197	119	989	1,272	58	26
SCON21M	1,513	422	21	367	1,346	42	24
DHING	3,912 717	1,509	82	1,149	1,123	22 17	11
RTO RICO		134	5	243	324	10	32
REIGN							
EIGN	355	131	52	92 913	111	8	1 6

ERIC Full fact Provided by ERIC

TABLE A-19.-NUMBER OF SCIENTISTS, BY STATE AND TYPE OF EMPLOYER, 1964

				1	TYPE OF E	1PLOYER					
STATE	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEOERAL GOVERN- MENT	OTHER GOVERN- MENT	MILITARY	NONPROFIT ORGANIZA- TIONS	INOUSTRY AND BUSINESS	SELF- EMPLOYED	OTHER	NOT EMPLOYEO	NO REPORT OF TYPE OF EMPLOYER
ALL LOCATIONS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,177	1,434	9,617	1+257
ALABAMA	1.887	576	412	98	115	62	547	18	8	42	9
ALASKA	452	98	149	71	42	6	80	3		2	, 1
ARIZONA	1,768	810	252	64	43	45	383	48	13	96 32	14
ARKANSAS	770	381	115	34	22	8	167	694	1119	1	145
CALIFORNIA	26,645	8,966	2.186	1.135	570 148	1,391	940	110	20		29
OLORADO	3,656	1,099	890   125	137	24	132	1,991	65	15		29
CONNECTICUT	4.149 2.387	11404	10	18	13	15	2,020	9	4		7
DELAKARE	7,175	639	4,766	80	400	522	393	82	123		27
FLORIDA	3,708	1,597	389	203	157	81	₹63	93	19	1	33
GEORGIA	2,238	984	336	94	132	17	515	44	17		15
HAHAII	742	324	125	50	69	31	100	11 8	1 1		1 5
1 PAHO	814	288	201	57	15	540	4,149		74	L.	65
ILLINOIS	11.537	4,978	461	401	133	560 46	1,621	211	8		29
INDIANA	4,628	2,392	134	116	3	24	321	lis	13	_	20
[ CHA	2.351 2.088	1,653	112	84	62	64	472	48	8	1 -	21
KENTUCKY	1,545	716	151	52	36	33	471	17	6		7
LOUISIANA	3,1,2	973	255	62	48	11	1,628	80	14		16
MAINE	589	273	32	50	25	41	130	6		32	
MARYLAND	7.005	1,542	2,939	136	662	115	1.229	55	25		35 58
MASSACHUSETTS	9,540	3,944	630	166	153	666	3.152	121	26		33
MICHIGAN	7,573	3,311	202	286	53	182	1,440	33	20		24
MINNESOTA	3.811	1,636	207 184	161	19	2	301	25	1 2		5
MISSISSIPPI	978 3,722	360 1,446	278	135	66	143	1.381	61	40		21
MISSOURI	797	283	225	51	27	5	149	15	3	29	10
MEBRASKA	1.118	596	138	51	104	22	126	14	7	1	9
NEVADA	430	152	105	30	22	1	94	7	4		3
MEN HAMDSHIRE	650	409	57	28	14	11	76	10	1		8
MEN JERSEY	11,844	1,884	448	170	74	235	8 • 242	194	20		10
NEW MEXICO	2,023	880	334	66	106	1,717	10,348	721	208		148
NEW YORK	24,510	8.375	225	904	52	80	779	26	l		12
NORTH CAROLINA	3,118 460	1,664	89	43	16	4	39	5	7		2
NORTH DAKOTA	10,135	3,131	934	280	200	559	4,364	123	81		56
OKLAHOMA	3,112	803	188	51	68	49	1,701	115		114	19
OSEGON	2,253	1,119	496	130	16	37	282	39		112	17
PENNSYLVANIA	12,813	4,394	608	322	51	582	5,958	171	7		1 %
RHODE ISLAND	895	506	55	24	52	22	195	24	1	- 1	3
SOUTH CAROLINA	1.203	473	85 90	57 32	111	10	27	1 6	1	1	
SOUTH DAKOTA	463	933	235	108	19	86	1.499	29	39		14
TENNE SSFE	3,108	1 - ::::	609	184	307	165	5,811	499	49		52
TEXAS	1,570		276	64	44	13	403	24		3 71	11
VERMONT	343		12	21	2		34	11		20	1 .
VIRGINIA	3,741	1,101	581	149	192		1.267	40			11 21
WASHINGTON	3,717		391	167	69	40	1,252			3   135 9   50	21
WEST VIRGINIA	1.513		91	61	2	18	876 925	36		1	39
WISCONSIN	3,912		184	201	16	6	282	4		1 26	
WYOMING	717			41 36			48	1		i ii	5
PUERTO RICO	355						959			. 1	
FOREIGN	7, 7,404	1 '7'	1 710	1 - 3	1	1	l	1	1	_	

					WORK AC	TIVITY					
STATE	TOTAL	RESEAR	CH ANO DEV	ELOPMENT	MANAGEM AOMINIS	ENT OR	TEACHING	PRUDUCTION AND	OTHER	NOT EMPLOYEO	NO REPORT OF WORK ACTIVITY
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D	TEACHING	INSPECTION	HER		ACTIVITY
ALL LOCATIONS	223,854	77,699	35,781	30,280	46,255	24,568	41,209	16,582	26,301	9,617	6,191
ALA8 AMA	1,887	622	220	292	443	243	375	178	171	42	56
ALASKA	452	118	80	33	125	43	50	14	131		12
ARIZONA	1,768	517	238	192	316	133	470	72	238	96	59
ARKANSAS	770 26,645	182	91 4,717	3,902	186	3,130	208 4,023	1,624	78 3,097	1,244	19 724
COLORADO	3,656	1,147	596	451	648	768	697	197	706	149	112
CONNECTICUT	4,149	1,689	745	633	860	522	707	254	308		104
DELAWARE	2,387	1,067	374	514	616	383	91	252	219	86	56
DISTRICT OF COLUMBIA	7,175	2,504	1,225	1,134	2,638	1,621	409	243	1,036		202
FLORIDA	3,708	1,121	543	413	743	349	775	203	478		115
GEORGIA	2,238	548	262	249	542	214	558	158	269 95	1	79
HAWAII	742 814	218	101 72	105	159 253	58 72	153 165	63	89		27
ILLINOIS	11,537	4,074	2,092	1,550	2,222	1,200	1	959	1,065		312
INOIANA	4,628	1,505	770	519	741	380	1,364	357	313		134
IOWA	2,351	814	507	271	290	120	822	101	161		70
KANSAS	2,788	465	262	170	276	113	689	124	356		65
KENTUCKY	1,545	423	211	138	250	101	431	172	160		53
LOUISIANA	3,172	658	288	277	532	186	569	421	820		87
MAINE	589	115	54	43	114	42	210	37 361	63 586		181
MASSACHUSETTS	7,005	3,34 <sup>7</sup> 4,121	1,816	1,177	1,606	1,149	1,786	460	726		246
MICHIGA4	7,573	2+656	1,218	1,058	1,445	783	1,768	576	617		179
MINESTA	3,811	1,322	590	518	737	412	593	247	356		113
MISSISSIP?I	978	211	107	97	201	49	225	71	205		32
MISSOURI	3,722	1,105	493	458	779	365		341	394		108
MONTA'14	797	137	76	57	203	42		43	161	,	31
NEBRASKA	1,118	251	133	106	103	75		45 23	156		53 14
NEVADA	430 550	116	30 130	35	100	40		15	53		15
VEH JERSEY	11,344	5,136	1,712	2,297	2,818	1,894		1,273	801		268
NEW MEXICU	2,023	829	384	349	439	2+7		119	321		37
NEW YORK	24,510	8,479	3,944	3,090	5,069	2,616	4,444	1+840	2,899		654
NORTH CAROLINA	3,118	1,087	635	378	524	258		161	253	1 .	87
NORTH DAKOTA	460	119	64	53	83	24		19	893		277
OHIO	10,135	3,567	1,344	1,529	2,103	1,288		926 268	786	i .	81
OREGON	3,112	794 586	318 331	223	578	121	1	81	215		72
PERNSYLVANIA	12,813	4,863	2,052	1,933	2,517	1,454	1	1,095	1,045		302
RHODE ISLAND	895	297	176	70	142	73		59	52		41
SOUTH CARULINA	1,203	286	92	145	310	129	293	128	107		38
SOUTH OAKOTA	463	99	47	50	83	26	1	16	44		21
TENNESSEE	3,103	1,212	611	387	597	348		277	245		90
TEXAS	10,660	2,559	990	1,154	2.020			1,257	2,580		318
UTAH	1,570	404	203 47	152	326	125		111	21		13
VERMONT	3,741	1,242	377	653	873	501		290	342		89
WASHINGTON	3,717	1,267	560	553	781	322		254	397		121
WEST VIRGIRIA	1,513	516	136	221	316	167	1	240	89	,	27
WISCONSIN	3,912	1,338	821	394	532	314	1,069	232	302		136
WYOMING	717	114	57	54	155	36		42	255		13
PUERTO RICO	355	74	36	33	74	33		31	50		18
FOREIGN	7 3,464	754	472	249	367	303	408	129	1,105	86	; 115

(A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.

(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

TABLE A-21.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STATE AND FIELD, 1964

CYAYE		ļ				sc	IENTIFIC	AND TECHN	LCAL FIE	L O				
STATE	TOTAL	CHEM-	EARTH	METEOR-	]	MATHE-	AGRICUL-	910100*		T		T		Т
		ISIKY	SCIENCES	OLOGY	PHYSICS	MATICS	TURAL	CAL	PSY-	STA- TISTICS	ECONOM-	OLOGY		
	<del> </del>		<u> </u>		<u> </u>		SCIENCES	SCIENCES		1		32001	11.03	FIELCS
ALL LOCATIONS -	11,000	11.000	10,300	10,600	12 000					†	<del> </del>	<del> </del>	<del> </del>	<del> </del>
ALABANA				<del> </del> -	<del> </del>	11,000		10,700	10,300	12,000	12,000	10.100	9,000	11,100
ALASKA	10,300	10 • 700	8.700	10,100	12.000	10,300		10,500	10,000		11,100			16,500
ARIZONA	9,800	8 • 600	9,500	10,300	3	10,700	10,300	11,500 9,500	10,000				!	
ARKANSAS CALIFORNIA	9,300		9,000			9,000	8 , 700	10,000	9,500		9.800			10,600
COLORADO	12,000	11 + 800	11,000	11,000	13.200	12.000	10,000	11.000		12,100	12.800	10,600	0.500	8,500
CONNECTICUT	10,900		11,300	11,000		10,000	9,200	10,600		10,500	10,400	107000	9,500	12.500
DELAWARE	13,500		9,400	12,000		11.000	9,000	10,700		11,400	11.000	10.500		10,400
DIST. OF COL	13,000		12,000	12.200		11,400		12,000	10.300		15-200	107300		10,400
FLORIDA	10,100	10.000	9,500	10.500	12,000	14.000	14,500	13,000		14,000	14,500	13,600	10,000	14,000
GEORGIA	10,000		9,500	9,800	10.100	11.000	9,100	10,000		12,000	12.200	10,500		10,700
HAWAII	10,000	9.700	10,500			9,500	9,300	10,000	10,000		10.800	9.200		10,000
IOAHO	9,000	9 900	9,500		11,200	9,000	9,400 8,400	10,000	10,500		10.800			10,600
ILLINOIS	10,800		9,500	10.800	11,400		9,800	8,700 11,000	7,800		10.000			9.100
INDIANA	10,200		9,700		10,000	9,200	9,500	10,600	10,000	11,000	12,600	10,500	10,000	10.200
IOWA	10,000	9 500	9,000		9 • 500	9,200	9,300	11,400	9,300		11.100	9.500	9,500	9,900
KENTUCKY	9,300	9.500	9,900		8,800	8,000	9,200	9,100	10,600		10.500	10,000		3.000
LOUISIANA	9.800	9.800	9,000		8,200	7,200	9,000	11.000	10,500		9,400 10,800			8,000
MAINE	10,000		10,300	9,800	9,000	9,200	8,900	10,000	9.800		10,500	9,000		9.606
MARYLAND	8,800 11,700				8 800	7•300	7,800	9+200	9,100		9,900			11.200
MASSACHUSETTS	11,000		10,400	11.700		12,100	10,800	12,100	11,000	12,400	11,000	11.000		8,000 12,000
MICHIGAN		11,100	9,000	12,000		12,000	10,000	10,100	10,000	12,500	11.500	10.500	9,100	11,000
MINNESOTA	10.500		9,000	10,600	11,000		9,000	11,000	10,200	11,600	12,000	11.000		11.000
MISSISSIPPI	9 300	9,000	10,000		10,400 7,500	10.300	9,700	10,500	10,800	10.400	11,000	10,600		10,000
MISSCURI	10.300		9,000	10,500	10,000	7.500 9.600	8,500	9,500	9,300		9:600			9,300
MONTANA	9,000	8,500	10,000	9.500		7,800	3,800 8,400	11,500	10,000	10.500	11.500	9,400		10,600
NEBRASKA	9,400	9.000	8+400		- 1	10,000	9,300	9,000			9,600			8,800
NEVAOA	9•800	9.600	10,000		10,000		9,000	8,000	9,500		9,800			9,100
NEW HAMPSHIRE		9.600	9,800		9,300	8.500	8,000	9,900	1					10 . 700
NEW JERSEY NEW MEXICO	12.000			10.600	13,400	12,500	10,400	12,000	10,000		11,400			9:600
NEW YORK	11.900			11.000	14 • 300	12,000	9,300	9,600			12,000	9,900		12.000
NORTH CAROLINA	11.800			10,500	12 • 000	12,000	10,300	12,000	10,600		13,500	11,000		12.000
NORTH OAKOTA	10,000   1 8,700	9.000	8,800	9,000	9,400	9.100	9:000	10,300	9,700		10,300	9,600		12.000
OHIO	10,600		8,200 9,300	10.700		8,000	9,000	9 • 600	9.000					10,000
OKLAHOMA	10,800		10,900	10.7C0 10.0C0	11,000		9,100	10,600	9,800		11,200	9.6C0	8.800	10,500
OREGON		9.500	9,100	9.800	10,400 8,800	9,600	8,600	10.300	10,000		10,700			12,000
PENNSYLVANIA	11,000 1	1.000	9,900	9.800	11,500	8,600	8,700	10,000	10,000		10.500	9.3CO		9.700
RHODE ISLAND	19,000 1	0.000	9,100		9,500	8.800	9,500	11,000	9.900		12,000	10,100	9,400	11.600
SOUTH CAROLINA	9,900 1				10,000	9,000	9.000	9.300			12,000	إ		11.000
SOUTH OAKOTA		8.400	8,700			6.700	8 + 400	9.100			10.300			9 • 500
TENNESSEE	10.800 1		9,000	9.800	12.000	9,000	8.800	11.200			9+300			
UTAH	10,300 1		10,800	9,800	10,400	10,000	9,000	10.000	10,000	1	10.500	0.500		11.200
VERMONT	10,000 1		9,800	10,000	9 200	10.000	9,600	10,100	8,700		!	9.500		11.000
VIRGINIA		9.000	.0.600			8 • 500	7.600	10,300			101300			10,500
WASHINGTON	4 -	0,000		10,400	10.300		9.000	10,100	10,200		10,800	9.100	1	12,000
WEST VIRGINIA		1.000	1	0.100	10.800		8.700	10,400	9,800		11,000	9.000		12,000
WISCONSIN	9,800 1		9,500 -		8,500	7,800	8.200	9,700	9.000 -	·   ;	10,000			10,400
WYOMING		9,400			9,600	9.800	9.300	10.000			11.400	9+400	9,500	9,100
PUERTO RICO		9,000					8,600	8,400	8 900 -	·  .	.			10.400
FOREIGN	11.300 1		12,100	0.300	7.000 1	1.600	12,000	10.000	10.000	1-			:	10,300
							-27000	9,600	10,000 1	[ 000ءد	14,500	11.200		12,000
NOTE - NO MEDIAN	MAS COMO	ITED CO	.0. 4444					1_						

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.



TABLE A-22.—MEDIAN ANNUAL SALARIES OF FULL TIME EMPLOYED CIVILIAN SCIENTISTS, BY STATE AND HIGHEST DEGREE, 1964

			HIGHEST	OEGREE		LESS THAN	
STATE	TOTAL	PH.D.	PROFESSIONAL MEOICAL	MASTER'S	BACHEL OR'S	BACHELOR*S CEGREE	OF DEGREE
ALL LOCATIONS	11+000	12,000	15,500	10,000	10,000	1C.3CC	10,800
ALADAMA	10,300	11,100	16,500	10,000	10,000		
ALASKA	10,900	13,000		10,600	10,300		
ARIZONA —	9,800	10,400		8,900	9,300	9,200	
CALIFORNIA	9,300	10,000		8,200	8,600		
COLCRA00	12,00C 10,500	13,000	16,000	11,000	11,000	11.CCC	12,0C0
CONNECTICUT	10,900	12,000	15,000 15,500	9,800 10,000	10,000 10,000	1C,30C	
DELAWARE	13,500	14,500		12,000	11,8CO	9,500	9,500
DISTRICT OF COLUMBIA	13,000	14.400	16,200	12,500	12,000	12,000	12,300
FLORIOA	10,100	11,200	161500	9+000	9,500	10,500	9,000
HAWAI!	10,00C	10,800	15,000	8,700	9,500		
IOAHO	10,000 9,000	11,000		9,300	9,000		
ILLINOIS	10,80C	10.300 12.000	17,500	8,700	8,5CO		
INOIANA	10,200	11,500	17,000	9,800 8,600	9,700 9,400	1C+600	10,200
IONA	10,000	11,200	18,000	8,000	8,700		9,600
KANSAS	9,300	10,300	18,600	7,500	9,100		
KENTUCKY —	9,800	11,000	16,000	8,200	9,000		
MAINE	10,000	10,500	17,000	9,600	10,000	9,80C	
MARYLAND	9,800 11,700	10,200		7,700	7,500		
MASSACHUSETTS	11,000	12,000	15,000 13,000	11,000 10,500	10,600 10,300	1C.3CC	12,0CO
MICHIGAN —	10,800	12,000	17,500	9,600	10,000	10,300 11,000	10,500 9,700
MINNESOTA	10,500	12,000	14,500	9,100	9,500	117000	9,700
MISSISSIPPI	9,300	10,000		8,300	9,000		
MISSUIRI	10,300	11,800	15,000	9,100	9:6C0	1C+3CC	9,5C0
VEBRASKA	9,000	10,000		8,500	9,000		
VEVADA	9,400 9,800	10,100		7,500	9,100		
NEW HAMPSHIRE	9,500	10.300		9,800 8,000	9,3C0 8,500		
NEW JERSEY	12,000	13,700	18,500	11,000	10,300	10,000	11,500
NEN MEXICO	11,900	13,800		10,600	10,500	11,000	117300
HEN YORK —	11,800	12,700	15,500	10,500	10,600	10,300	11,000
IORTH CARDLINA	1C.000	11,000	15,000	8,400	9,000	9 • CCC	
OHIO	8,700	9,800		7,800	8,300		
OKLAHONA	10,60C 10,800	12,000	16:000 15:000	9,800	9,900	10,000	11,0C0
REGON	9,200	10,500	16,300	10,000	10,300 8,400	1C,5CC	
ENNSYLVANIA	11,000	12,100	15,500	9,700	10.000	10,200	10,000
HOCE ISLAND	10,000	10,C00		9,000	10,000		101000
OUTH CAROLINA	9,900	10,500		8,500	9,700		
SOUTH OAKUTA	8,600	9,900		7,200	7,500		
ENAS	10,800	12,000	16,000	9,500	10,0C0		
ITAH	10,300	11,700	15,000	9,800	10,000	10,000	11,000
ERMONT	8,600	9,200	15,000	9,100 7,400	9,700 8,500		
/IRGINIA	10,600	12,000	15,000	10,000	10,000	10, COC	
ASHINGTON	10,000	11,400	14,000	9,400	9,200		
EST VIRGINIA	10,00C	12,000		9,000	9,500		
IISCONSIN	9,800	11,000	15,000	8,700	8,600		
PUERTO RICO	9,500	10,000		9,000	9,800		
FOREIGN	9,500	10,600	16.000	6,700	7,300		
	11,300	10,500	14,000	11,000	12,000	12,6CC	9,900

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

TABLE A-23.-MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STATE AND TYPE OF EMPLOYER, 1964

				TY	PE OF EMPLO	YER		-	
STATE	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEOERAL GOVERN- MENT	STATE GOVERN- MENT	NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF- EMPLOYEC	CTHER	DE TYPE OF EMPLCYER
ALL LOCATIONS	11,000	9,600	11,000	9,000	12,000	12,000	15,000	11,000	11+000
ALABAMA	10,300	9,600	11,800	8,700	11,100	10,300			
ALASKA	10,900	11,500	10,100	10,700		12,00C			
ARIZONA	9,800	9,400	9,800	8,000	11,500	11,000			
ARKANSAS —	9,300 12,000	9,200	9,500	7,300	14,000	9,400	17,000	11,000	13,200
COLORADO — — — — — — — — — — — — — — — — — —	10,500	9,500	11,000		10.900	11,000	13,000		
COMMECTICUT	10,900	9,000	10,500	9,900	10,800	12,000	18,000		
OLLAWARE	13,500	9,800				13,900			
OLLAWARE	13,000	9,830	13,000	11,800	14,500	14,900	18,000	14,500	
GEORGIA	10,100	10,000	10,400	8,000	10,000	11,100	14,300		
GEORGIA	10,000 10,000	9,400	9,800	10,500	12,200	10,500			
	9,000	8,600	9,000	7,500		10,200			!
***************************************	10,800	10,000	11,000	9,400	12,000	11,400	18,000	11,600	
1 ND 1 AN A	10,200	9,500	9,800	8 • 400	9,600	11,700			
10HA	10,000	9,800	10,300	7,900		10,400			
TOWA	9,300 9,800	9,000	9,300	8,2C0 7,300	11,600	10,400			
	10,000	9,000	10,100	7.200	107300	10,600	14,400		
	8,800	8,100	9,000	7,600	11,400	10,000			
44DVI 4ND	11,700	10,000	12,000	9,700	11,000	12,500			
WACCACUMCETTC	11,000	9,600	11,700	9,300	11,500	12,500	16,300	10.000	
	10,800	10,000	9,800	9,100	11,500	12,000	15,000		!
MILNESUTA	10,500 9,300	9,500 8,500	9,800	8,400 7,300	121300	10,100			
	10,300	9,500	10,000	7,800	10,600	12,000	15,000	9,500	
MONTANA	9,000	003.8	9,300	8,200	:	9,700			
**COD * CU *	9,400	9,000	10,600	6,800		10,000			
NEVAOA	9,800	9,200	9,500	7,000		10,500			
	9,500 12,000	9,000	10,100	9,100	11,000	12,500	16,000	12,000	
NEW NEW163	11,900	12,900	10,300	10,500	13,000	11,800			
NCO VOOV	11,800	10,000	10,900	10,000	11,500	13,000	17,500	11,700	12,500
	10,000	9,500	9,800	8,200	13,000	11,400			
NORTH CAROLINA	8,700	8,700	9,800	6,800	11,800	10,000	17,500	11,000	
OHIO	10,600 10,800	9,400	11,300	8,600	11,000	11,400	12,000	117000	
on sociii	9,200	9,500	9,000	7,900	11,200	9,800			
~	11,CCO	9,300	11,000	8+200	10,700	12,000	15,000	9,000	
DUODE 1014NO	10,000	9,000	10,000			12,000			
	9,900	8,600	10,000	8,300		11,000			
SGUTH OAKOTA	8,600	8,700 9,000	8,700	7,100	11,700	12,000		11,600	
JENNESSEE	10,800	9,000	10,000	7,600	10,000	11,200	13,500	10,000	
	10,000	9,400	10,100	7,200		10,600			
	0 (00	9,500				12,000			
WINCINIA	10,600	9,000	11,000	8,000	14,800	11,700	15,000	12,000	
WASHINGTO.4	10,000	9+100	9,300	6,300	11,000	11,400	15,000	12,000	
WEST VIRGINIA	10,000 9,800	8,800 9,500	10,600	8,500	10,000	10,500			
WEST VIRGINIA	9,500		9,300	7,400		10,000			
0116070 0100	9,500	8,300	10,600	7,200		11,700			
FOREIGN	11,300	8,500	12,900	7+600	9,600	13,000		10,000	

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

				WORK	ACTIVITY	,			
STATE	RESEAR	RCH ANO DEV	ELOPMENT		HENT OR		PRODUCTION		NO REPORT OF WORK
	TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (8)	OF R+D	TEACHING	AND INSPECTION	OTHER	ACTIVITY
ALL LOCATIONS	0 11,000	11,000	11,000	14,500	15,500	8,900	9,800	10,500	11,200
ALABAMA 10,30	1	10,700	10,600	12,900	14,000	9,000	9,500	10,000	9,600
ARIZONA 9,80		11.000	11.000	11.500		9,900		10,700	
ARKANSAS		9,900	10,000	9.800	,	9,000	8,400	10,000	10,000
CALIFORNIA		12.000	14.000	15,400	12,000	8 • 300 9 • 500	9,000	9.500	
COLORADO		11,400	10,100	12.700	14,000	8,800	9,000	11,300	12,000 10,800
DELAMAGE -	, -	10,000	10,900	15.000	15,500	8,700	10,000	10,300	12,500
DICTRICT OF COLUMN		12,800	12,800	18,600		9 200	12,000	13,200	14,400
FLORIDA 10016		11.700	12,000	15,700		9:400	12,000	12,000	13,000
GEORGIA 10.00 HAWAII 10.00		10,000 9,700	10,200 10,000	12,700	14,100	9,000	9,000	13,000	10,000
HAWAII 10.00		10,000	10,500		13,500	8.600 9.100	9,400	10,000	10,900
IOAHO 9.00 ILLINGIS 10.88	0 9,400	10,300	9,000		12,500	8,000	8,600	9,300	
TAINTAALA		11,100	10,500		15,000	9,000	9,600	10.200	11,000
10MA10,20		11,000	11,000	14,000		8,800	9.700	9,800	11,500
KANSAS 9,30		10,400	9,600	13.800	15,000	9,000	8+300	9,200	11,700
KENTUCKY		9,600 10,800	10.000 9.800	13,000 12,500		8,000	8,5C0	10,000	
LOUISIANA 10-00		10,000	10,000	13,500		8.300 8.500	9,000 9,200	9,600	9+600
MAINE 8 + 80		10,200	8,700	11.300	13,000	8,000	8,000	10,100 8,600	10,600
MARYLAND , 11 +70 MASSACHUSETTS 11 +00		11,000	11,000	15,000	15,500	9,000	10,200	10,400	12,000
14 TC++1 C AA1		10,500	11,600	15,500	16,000	8,900	10,000	11,000	12:000
MINNESOTA 10,80		11,400 10,600	10,800	14,000	15,000	9,000	9,600	10,100	11,300
MISSISSIPPI		9,800	10,200 9,300	13,500	14,400	8,900	9,300	10,500	13,000
MISSOURI		11,000	10,700	14,000	14,500	7,900 8,900	8,400 9,200	10,000	
MONTANA 9,00		9,000	9,800	9,300	10,200	8,200	8,300	9,700	10.000
NEBRASKA 9,40 NEVAOA 9,80		10,000	10,000	11,700	12,000	8:300	7,800	9,500	
NEW HAMPSHIRE			9,800	11,400	12,000	8,400		10,000	
NEW JERSEY		10,100	9,200 11,700	12,700 15,900	13,200	8,700		8.200	
NEW MEXICO 11,90		13,500	12,300	13,500	16,200 15,500	8,500 8,800	10,000	10.300	11,900
NEW YORK 11,80	11.500	11,500	11,700	16,000	16,700	9,300	10,000 10,200	10,000	11.500
NORTH CARULINA 10 • 00		10,000	10,500	13,000	15,000	9:000	9,500	9,000	11.500 12.000
NUKIH DAKUTA 8,70		10,200	9.000	10,000		8,100		8.100	
OHIO		11,400 11,500	10.300	14,000		8,900	9,600	10,000	12,000
OREGON 9,20 PENNSYLVANIA 11,00		9,500	11,000	14,400	15,000	8,500	10,000	10.200	10,000
PENNSYLVANIA 11.00		11,000	11,000	9,500 15,000	12,500	8.700 8.500	8,000	9.500	10,800
PENNYLVANIA	9.300	9,000	9,300	15,000	15,000	8,900	9,600 10,000	10,300	11,500 10,400
SUUTH CAROLINA	10,000	10,000	10,000	12,500	14,000	8,300	9.700	9,500	
TENNESSEE	9,000	9,500	8,500	9,400	11,400	8,000		8,500	
TEXAS	11,400	12,000	11,000	14,000	14,800	8,300	10,000	10,000	11,000
	10,000	10,600	10,500	14,200		8,600	9,400	10,000	10,500
VERMONT 8 + 60		8,900	10,000	11,700	15,000	8,800 8,300	9.300	9,600	10,000
VIRGINIA 10,60	10.609	10,100	11,200	14,100	15.000	8,400	9,800	10.530	10,500
WASHINGTON		10,400	10,500	12,000	15,000	8,400	9,000	10,000	10,300
10900		11,300	10,900	14,000		8,100	9,200	9,400	
WYOMING 9,80	1	10.000	9.600	12:600		8,800	9,000	10,000	10,900
PUERTO RICO 9,50		9,000	9,600 7,200	10,400	10,400	8,000	9.000	10,000	
FOREIGN 11,30		7.200	11,000	15,200		7,000 8,000	7,500 12,000	10,300	13.000
							12,000	12.000	12,000

<sup>(</sup>A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH OR DEVELOPMENT. NOT SEPARATELY IDENTIFIED.

NOTE—TEACHING SALARISS REFLECT A COMPOSITE OF ACADEMIC AND CALENDAR YEAR SALARIES FOR SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION. NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

LOCATION		SCIENTIFIC AND TECHNICAL FIELD									
COUNTION	TOTAL	CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURA				
ALL LOCATIONS	223,854	63,053	17,907	5,510	26,698	17,411	SCIENCES 9,525				
ABILENE, TEX	166,753	48,645	12.826	3,807	21,252	13,849	3,537				
AKRON, OHIO	156 983	18 626	87 18	10	5	4	3				
ALBUQUERQUE, N.MEX	32 1,407	3 475	5 38	9	45 1	39 1	5				
ALLENTUNN-BETHLEHEM-EASTON, PAN.J	655 587	88 249	79 29	13 28	335 17:	97 82	19 47				
AMARILLO, TEX	16 317	10 32	1		101	26	3				
ANN ARBOR, MICH	1,160	302 261	189	17	12 224	180	9				
ILANIA, GA	142	35	81	35 36	236	153	13 29				
ATLANTIC CITY, N.J	60 304	7	28	35	106	91	15 51				
USTIN, TEX	827	131 168	7 113	11	43	13	1 9				
ATON ROUGE, LA	1,879	51 539	159 53	10 14	13	55 10	5 11				
AY CITY, MICH	70	250 22	51	3	297	165 26	12 48				
INGHAMTON, N.YPA	113	224	41 81	2	13	3	3				
IRMINGHAM, ALA	349 275	129	10	2 2	46	3 57	7				
USTON, MASS	7,230	1,910		1	12	16	7				
OCK TON, MASS	201	84		226	1,708	719	28				
ROWNS VILLE - HARLINGEN-SAN BENITO, TEX	34	6	3	4	3	2	2				
ANTON, OHIO	104	776 39	28	10	150	93	2 4				
MARLESTON, S.C	1,495	296	6   125	28	20	3 14	1 2				
ARLOTTE, N.C	157 565	48	2	17	276	135 12	74 13				
ATTANOGGA, TENN-GA	224 169	111 90	6	8	8	11	8 2				
NCINNATI, OHIC-KYINO	7,615 1,528	2 • 831   710	198	127	828	23 494	4				
FORMOU SPRINGS. COLO = = = = =	2,550	1,091	53 37	20	78 411	87 139	39 10				
LUMBIA, S.C	184	15 54	10 11	15	30 19	37	2 6				
LUMBUS, OHIO	1.760	470	142	4	2	16	15 4				
VENPORT-ROCK ISLAND-MOLINE TOWARD	1,399	121 249	253 364	7 21	214	130	90				
ATUR, ILL	124 997	46 373	8 14	3	182	129	14 2				
WER, COLO	117	69 - 415	834	14	193	94	3 1				
ROLT, MICH	171 2,256	33 813	2	105	340	135 42	72 4				
O'H-SUPERIUR. MINN, -WIC	51 162	12 -	48	29 1	232	197 5	16				
HAM, N.C	648	241	20 11	4 2	11 91	12	23				
ENE, OREG	127	31 63	21 5	18	14	36 11	13 1				
L RIVER, MASSR.I	338 208	53 81	27 43	2	38	31	3 44				
CHBURG-LEOMINSTER. MASS	30   174	17 - 45		2	8 4	2	1 1				
T LAUDERDALE-HOLLYHOOD, ELA	31 117	16	1 3	1	11 2	12	25				
T SMITH, ARKOKLA	75 18	11	5	2	14	16	8				
WUKIN, 1EX = = = = =	178	38 58	8 2	2	25	2 52					
SNO, CALIF	208	26	93	22	66	63	6				
THAMMOND-EAST CHICAGO THE	244	119	5	3	4		44 1				
T FALLS, MONT	426 178	242 68	5 8	5	19	4 25	4 1				
NSBORO-HIGH POINT, N.C.	56 54	17	5	21 -	14	7	2 7				
LTON-MIODLETOWN. OHIO	165 66	63	4	3	5	16	4				
FORO, CONN	157 220	32 38	22	1 2	11	5 14					
CULUS TANGII	747 590	114	29 16	10 66	14 99	17	25 13				
INGTON-ASHLAND. WAVA THEY TOURS	,642 161	671	55 944	37 19	27 164	38	13 44				
ANAPOLIS. IND	5 <b>0</b> 0	87 105	15	1 18	143	148	17 2				
SON, MISS	905 41	391	13	5	44	110 55	5 1.8				
	314		- 1	- 1	3 1	2					
SONVILLE, FLA	147	20 36	178	2 15	9	<b>5</b>	5 20				

	T						_
			SCIENTIFIC	ANO TECHNIC	AL FIELO		
LOCATION	SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELOS
ALL LOCATIONS	27,135	16,804	2,843	12,143	2,703	1,351	20,770
STANOAR) METROPOLITAN STATISTICAL AREAS	19,359	13,041	2,257	9,490	1,979	1,000	15,711
ABILEN <sup>c</sup> , TEX	5	12		1	2		9
ALBANY, GA	32 6	43	 8	54 2	7	3	103 3
AL BUQUEROUE, N.MEX ALLENTOWN-BETHLEHEM-EASTON, PAN.J	151 50	64 33	21 13	46 11	10 2	1 3	137 48
ALTOONA, PA	23	36 2	<del>-</del>	37		1	71 1
ANAHEIN-SANTA ANA-GAROEN GROVE, CALIF ANN ARBOR, MICH	15 46 294	8 73	14	6 36	1 6	6	19 160
ASHEVILLE, N.C	15 203	173 6 99	26  22	70 5	42	47	100 13
ATLANTIC CITY, N.J	42	13 14	2	<del>-</del>	15		67 11
AUSTIN, TEX	100	64 10	10	5 38 7	21	30	45 55
BALTIMORE, MD	364 103	120 21	31 2	59 42	23	3	41 199
8AY CITY, MICH	9	16	1 3	3	7 3		67
BILLINGS, MONT	2	2 30	7	2 14	4		84
BIRMINGHAM, ALA	85	10	3	12	2	1	35 23
BOSTON, MASS	821 15	549 20	76 2	357 16	100	55	553 38
BROCKTON, MASS	5 14	13		<u>i</u>	1		3 2
BUFFALG, N.Y	187 14	97 11	20 1	50 5	26 2	7	151 18
CEDAR RAPIOS, IOWA	7 214	10 86	1 19	5 129	5 21	4 24	6 68
CHARLESTON, H.VA	32 14	5 6		4 10	2	2	,6 83
CHARLOTTE, N.C	13 5	20 10	3 1	17 2	4	i	19 20
CHICAGO, ILL	989 193	647 92	100 20	526 64	96 9	48 1	692 167
CLEVELAND, OHIO	233 10	164	25 3	152 11 \	24	8 2	244 14
COLUMBIA, S.C	16	21 11	1		1 1		14
CORPUS CHRISTI, TEX	204 8	136	26	113	30	15	186 25
OAVENPORT-ROCK ISLAND-MOLINE, IOMA-ILL OAYTON, OHIO	104	77	29	56 5	9	3	162 15
OECATUR, ILL	52 14	85	22	19 8	8	<sub>5</sub>	118 9
OES MOINES, IOWA	206	174 30	22	60 15	17	8	221 4
OUBUQUE, IOWA	208 8 22	240	24	154	26	7	262 <b>4</b>
OURHAM, N.C	143	16 40 14	13	27	2 8	1 4	14 19
ERIE, PA	12 28	7 54	3	3 4 27	2 1 14	2	20 11
EVANSVILLE, INDKY	34	14	2	5		2	15 15
FARGO-MOORHEAO, N.DAKMINN FITCHBURG-LEOMINSTER, MASS	37	11 2	1	20	2		4 4 3
FUNT, MICH	12 14	14	2	7 4	1 2	1	22
FORT SMITH, ARKOKLA	1 11	1 20		1 2	3		1 23
FORT WORTH, TEX	31 53	33 22	3	16 16	3	3 3	45 7
GALVESTON-TEXAS CITY, TEX	47	5	1	1 7			 45
GRRY-HAMMOND-EAST CHICAGO, IND GRAND RAPIOS, MICH	19 23	16 19	2	10 12	2 2	4 2	81 15
GREAT FALLS, MONT	5 9	1 3	1	1 1	1		-8 9
GREENSBORD-HIGH POINT, N.C GREENVILLE, S.C	21 6	14	2	12	8 3		12 7
HAMILTON-HIDDLETOWN, OHIO	23 17	24	1 14	9	4	1 1	14 22
HONOLULU, HAWA	34 136	64 43	10	54 43	6	8 24	88 43
HUNTINGTON-ASHLAND, W.VAKYOHIO HUNTSVILLE, ALA	141	85		107	8	7	316 18
INDIANAPOLIS, INO	207	65	7 10	25	1 9	1	<b>9</b> 8 62
JACKSON, MISS	3 46	18	4	2	1		11 10
JERSEY CITY, N.J	23 57	28	5	19	2	2	11 58
·	•	•	'	•	'	•	

		SCIENTIFIC AND TECHNICAL FIELD								
LOCATION	TOTAL	CHEMISTRY	EARYH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGR1CULTURAL SCIENCES			
STANDARO METROPOLITAN STATISTICAL AREAS-CONTINUED JOHNSTOWN, PA	42 405 775 111,345 277 136 310 995 147 86 25 144 449 34 514 449 34 514 140 9,390 524 1,754 1	7 7 211 316 449 7 7 74 151 156 2 37 26 16 16 16 16 16 17 7 16 17 17 16 1	4 11 17 17 17 17 10 10 65 1 20 2 1 1 10 10 65 1 20 2 1 1 10 10 65 1 1 20 11 10 65 1 1 2 1 1 10 65 1 1 10 10 10 10 10 10 10 10 10 10 10 10	66 	8 14 38 2 303 2 3 3 54 80 2 20 10 3 1 35 46 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	2 9 44 1 1 59 44 1 1 59 44 2 2 4 3 4 2 4 7 1 5 2 3 2 4 4 1 3 6 3 1 4 2 1 4 6 7 1 6 2 9 4 2 7 5 7 5 5 4 3 1 1 1 0 2 1 4 6 7 1 0 2 1 6 4 1 0 1 8 3 6 7 7 5 7 8 7 2 1 1 1 3 8 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 9 9 57 3 4 4 2 9 9 9 55 5 5 5 5 5 5 5 5 5 5 5 5 5 5			

ERIC Full Tout Provided by ERIC

	SCIENTIFIC AND TECHNICAL FIELD										
LOCATION	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELOS				
STANDARO ME IPOLITAN STATISTICAL AREAS-CONNUED JONNSTONN, PA	4 68 100 1 195 9 5 19 210 2 9 6 2 2 114 2 104 45 9 794 74 9	3 22 48 44 5 1 14 6 5 1 14 6 7 7 3 4 4 7 1 4 4 2 5 9 9 5 2 3 3 2 10 5 1 12 4 1 3 3 80 1 88 2 6 3 4 1 3 3 1 3 6 5 3 8 8 6 3 2 9 2 0 2 7 2 2 5 1 3 1 4 6 7 3 3 1 1 2 9 0 3 8 1 3 9 9 2 6 2 2 1 1 4 6 7 3 3 1 2 9 0 3 1 1 2 6 3 6 1 2 3 6 9 9 2 6 7 2 2 1 1 4 6 7 3 7 1 5 5 1 4 3 5 6 1 9 1 2 6 3 6 1 2 3 6 9 9 2 6 7 2 2 1 1 4 6 7 3 7 1 5 5 1 4 3 5 6 1 9 1 2 6 3 6 1 2 3 6 9 9 2 6 7 2 2 1 1 1 4 6 7 3 7 1 5 5 1 4 3 5 2 3 8 1 6 2 1 5 2 1 4 3 5 2 3 8 1 6 5 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 24 51 1 36 2 7 9 120	13 9 13 3 32 1 1 5 24 15 5 4 83 7 1 28 1 3 3 7 1 26 2 9 247 16 2 1 16 6 7 1 5 2 5 4 7 30 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	9 21 68 1 118 129 34 43 2 16 32 16 34 43 2 16 32 16 32 16 32 17 3 9 6 2 2 1 17 3 9 6 2 2 8 8 32 6 12 17 3 9 6 2 2 8 6 2 1 415 7 3 9 6 2 2 8 6 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				

TABLE A-25.-NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964-CONTINUED

			s	CIENTIFIC AND	TECHNICAL	FIFLD	
LOCATION	T0T^L	CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHENATICS	AGRICULTURAL SCIENCES
STANDARD METROPULITAN STATISTICAL  AREAS-CONTINUED  SAVANYAH, GA	118 67 1,708 259 34 45 312 134 66 80 35 386 476 1,000 2200 315 1189 8 421 156 1,515 721 719 156 1,515 721 719 156 1,718 186 42 125 11,788 186 42 125 11,788 186 42 125 11,788	36 21 331 27 6 8 114 27 8 21 4 164 284 13 24 277 47 47 47 47 47 47 47 47 47 47 47 47 4		8	7 285 5 2 4 55 8 3 3 24 64 3 9 154 . 86 30 2 41 6 400 92 29 16 	8 3 189 16 1 5 34 9 9 10 5 48 21 3 4 100 11 36 13 1 25 10 148 39 39 10 1 14 1 5 1,109 5 7 4 28 8	14 2 86 3 2 1 11 11 9 7 1 5 7 22 25 2 4 2 3 4 13 4 5 6 1 2 3 2 350 15 15 11
WINSTON-SALEM, N.C	195 341 94 106	79 105 30	25	3 2 2 3	11 34 10 5	19 35 6 8	3 3 5
OTHER LOCATIONS	57,101	14,408	5,081	1,703	5,446	3,562	5,989

TABLE A-25.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

	SCIFNTIFIC AND TECHNICAL FIELD									
LOCATION	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTECS	ECONOMICS	SUCTOFORA	LINGUISTICS	OTHER FIELOS			
STANDARO METROPOLITAN STATISTICAL AREAS-CONTINUED SAVANIAM, SA	23									
SCRANTUN, PA	6	· 6		5			15			
SEATTLE-E/ERETT, WASH	255	119	1	2	- 6		8			
SHREVEPORT, LA	5	9	20	75 5	17	17	146			
SIOUX CITY, IGWA-NERR	ĺ	4		2	1 2		22			
SIOUX FALLS, S.CAK	,	8		1	1		2			
SOUTH BENO, IND	29	ıĭ		30	8	1	3			
SPOKANE, WASH	14	12	2	9	ž	i	19 15			
SPRINGFIELD, ILL	9	10	3	ż	2	·	3			
SPRINGFIELO, MO	11	5		10	5		3			
SPRINGFIELD, OHIO	4	5	1	ı	4		3			
SPRINGFIELD-CHICOPFE-HOLYUKE, MASSCONN	25	34	4	15	3	2	55			
STAMFORO, CONN	9	22	4	7	1	1	57			
STEUBENVILLE-WEIRTON, OHIO-W.VA	4			2			6			
STOCKTON, CALIF	18	13	1	2	2	1	6			
SYRACUSE, V.Y	124	96	11	58	15	8	88			
TAMPA-ST. PETERSBURG, FLA	24	35	3	12	3		15			
TERRE HAUFE, INC	41 33	61	4	14	8	1	38			
TEXARKANA, TEXARK	23	12	1	11	5		21			
TOLEOD, OHIO-MICH	27	37	6							
TUPEKA, KANS	20	÷6	3	22	10		56			
TRENTON, 1.J	a7	125	16	7 51	3	,1	14			
TUCSON, ARIZ	121	43	6	48	16 13	13	128			
TULSA, OKLA	13	25	6	24	2	4	50			
TUSCALOOSA, ALA	ii	24	3	16	7	2	87 5			
TYLER, TEX	1			i			7			
UTICA-ROME, N.Y	11	13 i	3	3			23			
VALLEJO-NAPA. CALIF	14	18	1	i			10			
WACU, TEX	10	20	2	3 !	2		9			
WASHINGTON, D.CMOVA	1.632	771	442	1,357	179	122	907			
WATERBURY, CONN	7	6	1	9			28			
WATERLOO, IOWA	3 !	5	1	1	1		8			
WHEELING, W. VAOHIO	15	7	3				11			
WICHITA, KANS	22			3	1		2			
WICHITA FALLS, TEX		29	2	11	3		25			
WILKES-BARRE-HAZLETON, PA	5	16	1	5						
WILMINGTON, DELN.JMO	25	60	22	151	5		6			
WINSTON-SALEM, N.C	44	15	3	151	2	2	330			
WORCESTER, MASS	41	35	í	21	5	2	15 32			
YORK, PA	7	13	i	5	í		11			
YOUNGSTOWN-WARREN, OHIG	1i	15		ś '		3	14			
OTHER LOCATIONS	7,776	3,763	586	2,653	724	351	5,059			

			HIGHEST	DEGREE			NO REPORT	
LCCATION	TOTAL	PH-O•	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR • S	LESS THAN BACHELOR'S OEGREE	NO REPORT OF OEGREE	
ALL LOCATIONS	223,854	79,372	5,925	61,222	72,364	2,878	2,093	
STANDARO METROPOLITAN STATISTICAL AREAS	- 166,753	60,255	5,197	44.60B	53,030	2,041	1,622	
ABILENE, TEX	- 156 983	25 284		52 220	73 459	6	11	
ALBANY, GA	32 1,407	675	37	8 319	18 360	3 11	5	
AL BUQUER QUE, N.MEY ALLENTOWN-SETHLEHEM-EASTON, PAN.J	655	261 216	13	199	167 182	12	3	
ALTONA, PA	16	31	4	5 86	8 179	10	7	
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	1,160	323 782	7 66	336 504	447 181	27	20 10	
ASHEVILLE, N.C	142	32 398	51	35 272	57 310	13 16	5	
ATLANTIC CITY, N.J AUGUSTA. GAS.C	- 60	9 93	20	22 69	24 120	4	1 2	
AUSTIN, TEX	332 332	354 26	4 2	247 112	210 182	8 6	4	
BALTIMORE, MD	1.879	643 289	180 1	443 185	570 183	22	21	
BAY CITY, MICH	70 7 412	33	1	23 86	11 254	1 2	2 3	
BILLINGS, MONT BINGHAMTON. N.YPA	113	6 113	2	55 87	50 137	1 6	1 4	
BIRMINGHAM, ALA	275	91	38	51	90	4	1	
BOSTON, MASS	- 7,230 - 201	2,947 50		1,889	1,862 87	83 5	65	
BROCKTON, MASS	니 44 - 34	19		14	10	1 1		
BUFFALO, N.Y	- 1,599 - 104	, 581 24	62	364 31	545 47	28 1	19 1	
CEDAR RAPIOS, IOWA	102	43 809	· 11	31 458	28 203	8	6	
CHARLESTON, S.C	157 565	52 141	• 9	35 111	51 291	6	6	
CHARLOTTE: N.C	224		4	52 38	99 80	6 3	2	
CHICAGO, ILL	7,615	2,744 460	273	2,085	2,344	86 17	83	
CLEVELANO, OHIO	2,550 167	. 773 53	116	690 63	925 43	22	24	
COLUMBIA, S.C	184	81	3	33 16	64	1	2	
COLUMBUS, OHIO	1,760	716 44	! 36 ; 1	522 113	458 269	12	14	
OALLAS, TEX	1,399	426 ! 20	44	366 43	524 56	23	16	
OAYTON, OHIO	997	289 42	12	278 28	388 43	14 2	16	
OENVER, COLO	2,609	812 51	51 2	730 65	967 49	26 3	21	
OETROIT, NICH	2,256	693 20		726 22	725	36	28	
OULUTH-SUPERIOR, MINNWIS	162	56 . 370	57	41 109	60 108	3	1 4	
EL PASO, TEX	149	32 31	2	44	5 <b>7</b> 50	10	1	
EUGENE, OREG	338	164	2	77 48	97 84	3	3	
FALL RIVER, MASSR.I	30 174	98	! 1	10	15 25	1	1	
FITCHBURG-LEOMINSTER, MASS FLINT, MICH	31	30	2	10 60	12 23	1	i	
FORT LAUDERDALE-HOLLYWOOD, FLA FORT SMITH, ARKOKLA	75	23	5	7	23			
FORT WAYNE, IND	178	107	1 3	55 158	164	6	3 4	
FRESNO, CALIF	208	<u>9</u>		1	61	3		
GALVESTON-TEXAS CITY, TEX	426	143	2	53 132	111	1	6	
GRAND RAPIOS, MICH	178	49	2	61	62 34	2	2	
GREEN BAY, WIS GREENSBORO-HIGH POINT, N.C	165	16	1	12 46	22 51	2 2	1	
GREENVILLE, S.C	157	17 86		13 28	35 42		1	
HARRISBURG, PA	220 747	193	5 9	78 213	83 313	11	6	
HONDLULU, HAWAII	590 - 2,642	260 597	61	156 676	1,256	10 39	33	
HUNTINGTON-ASHLAND, W.VAKYOHIO	161	35	1	30	88	3 9	1 ?	
TORISVILLEY ALA	500	88		146	251	1	2	
INDIANAPOLIS, IND	905	304 5	49	249 18	288 18	8	7	
INDIANAPOLIS. IND	905	304	24 2 17	249	288	1	2	

			HIGHEST	OEGREE			
LOCATION	TOTAL	рн.О.	PROFESSIONAL MEDICAL	MASTER'S	BACHEL OR S	BACHELOR'S OEGREE	NO REPORT OF DEGREE
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED KALAMAZOO, MICH	405 7775 111 1.345 277 136 310 995 127 147 86 25 144 194 194 19,390 524 110 215 91 62 382 65 608 878 2.898 107 777 89 91 1.278 11,278 11,278 14,870 4,462 225 209 202 49 89 89 39 1.103 263 668 732 668 732 669 732 669 732 676 1969 1979 1979 1979 1979 1979 1979	233 216 4 622 25 17 540 	8 31 17	79 207 2316 90 29 79 285 51 31 8 4 96 169 46 23 2.641 145 141 59 24 16 491 16 491 16 491 17 17 18 303 26 29 71 126 24 18 303 37 365 4.188 1.120 118 96 365 26 79 1.499 209 705 27 39 176 170 433 260 118 96 365 26 79 1.499 209 705 27 39 176 170 43 26 36 163 28 410 115 8 410 115 8 410 115 8 410 115 8 410 115 8 410 115 8 410 115 8 410 115 8 410 115 8 410 115 8 410 115 8 410 115 8 410 115 8 410 127 127 128 129 129 124 125 129 124 125 129 124 125 129 124 125 125 126 126 127 127 128 129 129 129 129 129 129 129 129 129 129	82 283 4 379 157 89 126 156 7 74 34 9 2 70 198 60 60 60 63 60 61 193 39 57 25 364 8 111 2 139 311 952 29 16 311 114 9 7 197 498 4,042 1,503 118 79 73 34 47 116 121 121 139 149 150 160 171 171 172 173 174 175 176 177 177 177 177 177 178 178 178	1 24 1 7 7 5 1 1 1 2 2 1 1 3 3 1 4 3 3 1 1 3 9 8 8 2 2 2 2 2 2 3 3 3 3 1 2 1 1 1 6 6 2 3 3 3 3 1 5 1 1 1 0 7 2 2 1 7 3 1 6 8 8 1 1 1 7 2 6 6 5 4 1 1 9 2 6 6 5 4 1 1 9 2 6 6 5 4 1 1 9 2 6 6 5 4 1 1 9 2 6 6 5 6 6 3 2 2 1 4 1 1 6 6 8 3 2 2 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 14

TABLE A-26.—NUMBER OF SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND HIGHEST DEGREE, 1964—CONTINUED

			HIGHEST	OEGREE		LESS THAN	
LOCATION	TOTAL	PH.O.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR S	BACHELOR'S OEGREE	NO REPORT OF DEGREE
STANDARO METROPOLITAN STATISTICAL AREAS - CONTINUEO SHREVE PORT, LA	259 34 45 312 134 66 80 35 386 476 31 104 1.000 220 315 189 421 156 1,515 721 719 156 134 140 102 125 11.788 186 42 85 32 401 10 86 2,594 195 341 94	17 6 14 137 34 8 31 17 193 10 39 396 48 114 88  154 62 761 323 166 78 4 28 23 44 4,673 31 18 32 7 7 18 23 44 4,673	2 1 2 1 3 1 1 30 5 6 3 5 8 10 8 2 2 3 1 11 19 7 1	71 12 19 63 45 26 26 12 120 140 9 35 274 56 107 48 3 375 212 180 43 44 47 34 24 3,278 38 13 28 6 106 3 3 484 29 82 82 82 82 82 82 83 84 84 84 84 84 84 84 84 84 84 84 84 84	155 14 9 103 500 30 22 6 143 136 11 26 284 103 74 50 55 144 44 352 167 350 35 82 57 36 49 3•121 113 8 23 18 225 715 49 80 44	9 1 3 5 4 1 3 7 7 7 2 2 7 7 15 2 2 7 7 3 3 2 7 3 3 2 7	5 
YOUNGSTOWN-WARREN, OHIO	106	21	2	38	42	3	
OTHER FORMITMS	57,101	19,117	728 .	16,614	19,334	837	471

					TV05 05						Γ
		<del></del>			TYPE OF	EMPLUYER					
LCCATION	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEOERAL GCVERN- PENT	CTHER GOVERN— MENT	HILITARY	NONPROFIT ORGANIZA- TICNS	ANC	SELF EMPLOYEO	OTHER	NOT EMPLOYEO	NO REPCRT OF TYPE OF EMPLOYER
ALL LOCATIONS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
STANDARO METROPOLITAN STATISTICAL AREAS	166,753	53,376	16,942	4,926	3,460	7,765	67,819	3,488	1,085	6,988	
ABILENE, TEX	156	42	5	4	8	1	69	17	1,003	6	904
ALBANY, GA ALBANY-SCHENECTADY-TROY, N.Y	983 32	178 5	7	12	16		747 2	6 1		24	5
ALBUQUERQUE, N.PEX ALLENTOWN-BETHLEHEM-EASTON, PAN.J	1,407 655 587	412 138	46 112	151 26	6 58	12 32	722 249	4	2 14	48 18	4 2
ALTOONA, PA	16 317	213 6 39	? 1 42	7			303 8	8	5 	35 1	3
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	1,160	128	5	6 14	12 9	5	173 933	29	1	10	
ANN ARBOR, MICH	1,547 142	1+154	31 73	21	10 1	23 1	176 42	20 14 3	5 2	33 106	7 1C
ATLANTA, GA	1,053 60	453 4	164 30	44	48 3	7 2	251	30 1	14	9 38 7	4
AUGUSTA, GAS.C	304 827	58 553	35 32	16 49	<b>8</b> 6	1 9	163 97	2 10	16 2	3 64	2 5
BALTIPORE, MO	332 1.879	31 720	34 154	7 72	31 51	64	206 656	19 21	11	3 117	13
BAY CITY, MICH BEAUMONT-PORT ARTHUR, TEX	665 70 412	327 35 47	27 3 6	19		1 2	260 24	2	3	25 1	1
BILLINGS. MONT	113	13	15	1 2 4		<u>1</u> 3	339 77	5	2	10	2
BIRMINGHAM, ALA	275	114	7	3		51	238 84	6	3	8 7	1
BRIDGEPORT, CCNN	7•230 201	3,036 49	537 7	125	100	516 5	2•278 121	90 7	49	457 11	42
BROCKTON, MASS	44	17	14			1	В	i		3	
BUFFALO, N.Y	34   1,599   104	483 34	16 43	90 2		131	7 759	2 11	 8	1 67	7
CEDAR RAPIDS, ICWA CHAMPAIGN-URBANA, ILL	102	50 1,189	29	101	25	6	57 47	1		3	~~~~
CHARLESTON, S.C	157 565	66 23	24	20	19	6	14 41 496	3 1 2	2	116	10 1
CHARLGITE, N.C	224 169	5 <b>5</b> 24	13	3 8	1	6	143	3 2	2	16 5 5	1
CHICAGO: ILL	7,615	2,761 354	210 212	177 20	37 44	531 31	3,320 761	161	64	31 2 68	<b>42</b> 8
CCLORADO SPRINGS, COLO	2,550 167 184	686 52 110	301 16	42	7 40	104	1,241	44	19	90	16 2
COLUMBUS, GAALA	47	10 839	16 3 63	23 1 86	3 19 28	1	19			10	
CORPUS CHRISTI, TEX	432 1•399	15 261	5 48	4	7 5	341	25 <b>8</b> 356 921	19 38	20	95	11 2
OAVENPORT-ROCK ISLAND-MOLINE, IOMA-ILL	124	43	36	3	2	3	31	60	18	36	
DECATUR, ILL DECATUR, ILL	997	147 26  -	285	21		49	330 84	6	13	26	3 1
OES MCINES, ICHA OETROIT, MICH	2,609 171 2,256	658 51 659	683 12 53	81 17	59	133	761 74	88 5	18	109	19
OURUQUE, IONA OULUTH-SUPERIGR, MINN,-WIS	51 162	38	1 -	85	5	122 1 7	1.171	37	12	94	9
OURHAM, N.C	648 149	368 49	35 15	1 2	24	57	36 137 46	1 3 3	3	7 38	2
ERIE, PA EUGENE, OREG	127 338	44 238	1 35	1 7		3	73 19	1 1	i	5 3 29	
EVANSVILLE, INDKY FALL RIVER, MASSR.I FARGO-MOORHEAO, N.DAKMINN	208 30	30 10 -	4	3	1	4	150 15	11 -		4 2	2
FITCHBURG-LEOMINSTER, MASS	174 31	137		5	1	1	2 22	1  -		8	1
FORT LAUDEROALE-HOLLYWOOD, FLA FORT SMITH, ARKOKLA	117 75 18	62 20 4  -	6	1 5 1		3	16	• ;	2	2 17	2
FORT WAYNE, INO	178 442	55 124	3 43	11 6	<del>2</del>	1 5 3	7 96	3 -		4	1
FRESNO, CALIF	208	97	38	29		2	219 30 1	18   -		6	5
GALVESTON-TEXAS CITY, TEX GARY-HAMMOND-EAST CHICAGO, INO	244 426	64 86	12 -	3		1 6	153 321	3	1	9	1
GRAND RAPIOS, MICH GREAT FALLS, MONT GREEN BAY, HIS	178 56	78 7	19	5	13	7 2	70 7	8	2	4	1
GREENSBORU-HIGH POINT, N.C GREENVILLE, S.C	165 66	23 77 24	1 4	6	1	1 2	67	2 -	1	1 5	1 1
HAMILTON-MIDDLETOWN, OHID HARRISBURG, PA	157 220	111 -	<del>-</del>	89		<u>1</u>	30 38	7  -		7	
HARTFORO, CONN	747 590	118 288	17	45 38	1 28	70 27	54 463 84	2 9 8	3 6	15	6
HUNTINGTON-ASHLAND, H.VAKYDHID	2,642 161	432 39	109	15	18	31	1.827	113	5	24 81 3	1 11 1
HUNTSVILLE, ALA	500 905	13 212	223 56	11 40	23	2 8	217 544	1 8	3	6 26	1 1 3
JACKSON, MISS	41 314 147	71	30	18	2		22 171	15	1	1 4	2
JERSEY CITY, N.J	548	16 156	8	6 -		3 6	65 350	9	1	5 14	3
							•	•	•	•	414

					TYPE OF E	EMPLCYER					
LCCATION	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEDERAL GCVERN- PENT	CTHER GCVERN- PENT	HILITARY	NGNPROFIT ORGANIZA- TIONS	AND	SELF- EMPLOYEC	OTHER	NOT EMPLOYEO	NO REPORT OF TYPE OF EMPLOYER
STANDA CO METROPOLITAN  STATISTICAL AREAS-CONTINUED JOHNSTOMN, PA	22 20 2,252 796 32 543 - 842 - 1,471 - 6,342	25 107 174 4 329 38 25 68 775 10 322 7 349 82 2,792 110 143 38 11 1,310 11 275 63 1,172 23 31 17 65 12 282 11 26 394 4,655 404 128 394 146 15 169 17 27 28 28 28 28 28 28 28 28 28 28 28 28 28	2 2 91 113 113 1 1 6 1 37 3 4 4 2 2 2 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	242 57 29 7	3 104 54 54 199 14 4 15	55 52 391 54	10 10 10 10 10 10 10 142 522 10 10 10 10 10 10 10 10 10 10 10 10 10	7 7 7 3 3	2	1 112	1 3 1 2 1 5 

ERIC

TABLE A-27.-NUMBER OF SCIENTISTS, BY STANDARL SETROPOLITAN STATISTICAL AREA AND TYPE OF EMPLOYER, 1964-CONTINUED

					TYPE OF	EMPLOYER					
LCCATION	TOTAL	EDUCA- TIGNAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GCVERN- PENT	MILITARY	NONPREFIT ORGANIZA- TIONS	AND	SELF- EMPLOYED	OTHER	NOT EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
STANDARD METROPOLITAN STATISTICAL AREAS-CONTINUEC SEATILE-EVERETT, WASH SHREVEPORT, LA	1,708 259 344 45 312 134 66 80 35 386 476 31 104 1,000 220 315 189 81 421 156 1,515 721 719 156 134 140 102 125 11,798 186 42 401 100 100 100 100 100 100 100	809 17 14 26 224 53 7 49 28 107 29 13 53 487 128 88 2 161 39 458 473 56 104 6 41 22 50 1,386 15 25 12 63 12 12 12 12 12 12 12 12 12 13 14 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	119 11 4 5 3 19 2 5 16 14 16 14 16 1 1 1 2 48 17 22 48 17 14 26 20 15 7,C11 1 9 2 4 20 4 5 1 1 2	42 24 11 36 33 41 52 19 22 16 14 1 2 13 25 77 11 7 12 1 6 16 13 127 3 127 3 127 10 2 10 2 10 10 10 10 10 10 10 10 10 10 10 10 10	14 19 3 	20 1 1 2 3 3 3 3 	582 173 6 9 50 36 19 17 2 233 422 15 17 377 65 89 19 19 721 73 560 16 103 44 8 8 1,095 15 10 27 14 245 10 2,236 88 91 40 40 40 40 40 40 40 40 40 40 40 40 40	34 25 1 2 2 1 2 7 1 4 13 3 13 2 2 117 35 2 2 117 35 2 2 117 3 1 3 1 3 1 3 1 3 1 1 2 2 1 1 1 2 2 1 1 1 2 2 2 3 1 3 1	1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	73 6 1  26 4 2 3 2 15 12 2 3 8 61 12 2 3 8 2 15 4 98 53 22, 5 10 298 53 21, 5 10 298 5 10 298 10 10 10 10 10 10 10 10 10 10 10 10 10	8 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0145K F004110V2	57,101	24,351	6,463	2,546	2,062	957	16,602	789	349	2,629	353

SUURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

					WORK AC	TIVITY		·			
LOCATION	TUTAL	RESEAR	CH AND DEV	ELOPMENT	MANAGEM AOMINIS	ENT OR		PRODUCTION		NOT EMPLOYEO	NO REPORT OF WOR
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	0F R+0	TEACHING	ANO INSPECTION	OTHER	<u> </u> 	ACTIVITY
ALL LOCATIONS	223,854	77,699	35.781	30•280	46,255	24,568	41,209	16,582	26,301	9,617	6,191
STANDARD METROPOLITAN STATISTICAL AREAS	166,753	61,147	28,345	23 • 445	34,675	19,545	26,840	12,523	20,071	6,988	4,509
BILENE, TEX	156 9113 12	9 392 5	6 78 3	3 173 2	23 214 7	4 154 1	33 127 5	9 145 2	71 54 12	6 24	5 27 1
LBANY-SCHENECTACY-TROY, N.Y LBUQUERQUE, N.KEX	1,407 655	622 254	297 105	228 125	242 165	158 106	262 85	111 22	88 97	48 18	34 14
LLENTOWN-BETHLEHEM-EASTON, PAN.J LTOONA, PA	58 ' 16 317	184 2 37	47	95 1 24	102	58 2	160	62 5	33 1	35 1	11
NAHEIM-SANTA ANA-GAROEN GROVE, CALIF	1,160	489	70	260	314	229	31 107	34 76	150 119	10 33	22
NN ARBOR, MICH	1,547 142	693 45	460 6	195 29	160 36	121 16	445 8	21 10	93 32	106	29
TLANTA, GA	1,053	247	119	107 14	252 21	110 14	265	88 2	134 9	38 7	29
UGUSTA, GAS.C	304 827	105 343	29 251	57 76	82 97	36 52	25 215	51 18	32 65	3 64	6 25
AKERSFIELD, CALIF	332 1,879	56 790	11 405	35 272	59 322	23 197	21 314	41 134	146 152	117	50
ATON ROUGE, LA AY CITY, MICH EAUHONT-PORT ARTHUR, TEX	665 70 412	265 19 102	1 03 8 9	113 9	118	62	143 19	61	34 7	25 1	19
ILLINGS, MONT INGHAMTON, N.YPA	113	3 133	12	55 2 65	83 16 81	29 2 48	40 12 70	142 12 34	26 70 19	10	4
IRMINGHAM, ALA	275	95	47	41	52	25	59	32	24	7	6
OSTON, MASS	7,230 201	3**i66 51	2,024 5	1 • 034 20	1•181 56	777 32	1,087 40	290 22	568 17	457 11	181 4
ROCKTON, MASS ROWNSVILLE-HARLINGEN-SAN BENITO, TEX	44	12	7	3	7	2	16	1	5	3	
UFFALO, N.Y	34 1,599 104	634 37	271 3	239 19	7 307 23	1 193 9	283 25	155	6 119 11	1 67	34
EDAR RAPIOS, IOWA — — — — — — — — — — — — — — — — — — —	102 1,495	2ti 668	539	19 121	11	6 79	43 431	10 9 8	7 96	3 3 116	2 1 52
HARLESTON, S.C +	157 565	30 262	10 51	16 102	26 127	8 79	50 22	12 100	28 33	3 16	8
HARLOTTE, N.C — — — — — — — — — — — — — — — — — — —	224 169	32 44	3 4	12 24	54 44	23 25	54 21	45 40	24 13	5	10
HICAGO, ILL	7,615 1,528	2,901 541	1,3 <b>9</b> 3 202	1 <b>,</b> 152 221	1,608 354	917 218	1,147 233	690 157	764 130	312 68	193 45
LEVELANO, OHIO	2,550 167	1,084 32	451 3	458 22	508 33	314 10	329 65	238 8	228 19	90 6	73 4
GLUMBIA, S.C	184 47	37 8	25	11 8	35 14	13 4	66 5	13	18 10	10	5
OLUABUS, OHIO ORPUS CHRISTI, TEX	1,760 432	573 64	298 11	236 28	316 69	199 25	427 11	58 75	244 202	95 4	47 7
ALLAS, TEXAVENPORT-ROCK ISLANO-MOLINE,  IOHA-ILL	1,399	437	139	227	320	139	168	107	290	36	41
AYTON, OHIO	997 117	23 432 35	187 9	16 186 20	26 275 29	203 15	42 110 22	16 58 20	11 71 6	26 1	2 25 4
ENVER, COLO	2,609 171	907 21	513 3	312 13	440 57	206 14	378 40	142 15	559 31	109	74
ETROIT, MICH	2,256 51	747	274	337 3	488	260	431 31	235	210	94 1	51
JLUTH-SUPERIOR, MINNWIS JRHAM, N.C	162 648	13 338	2 24,2	10 95	35 82	8 65	75 147	9	21 23	7 38	15
L PASO, TEX	149 127	18 41	5 7	11 27	28 25	8 14	35 35	24 12	33 8	5 3	6
JGENE, OREG — — — — — — — — — — — — — — — — — — —	338 208	93 63	83 21	9 32	56 50	15 25	122 24	8 26	18 35	29 4	12
ALL RIVER; MASSR.I — — — — — — Argo-moorhead; N.OakMinn — — — —	30 174	6 59	38	4 21	6 18	5 7	9 70	5 1	1 12	2 8	1
ITCHBURG-LEOHINSTER, MASS LINT, MICH	31 117	8 20	1	3 9	9 16	7	7 63	5 5	2	2	2
DRT LAUGERGALE-HOLLYWOOD, FLA DRT SMITH, ARKOKLA	75 18	10	2		15 2	6	15 6	2	12 8	17	
DRT WAYNE, INO	178 442	32 103	4 29	16 58	50 89	21 39	49 87	17 47	19 86	14	7 16
RESNO, CALIF	208	34	8	26 	38	12	89 1	13	17 1	6	11
ALVESTON-TEXAS CITY, TEX ARY-HAMMONO-EAST CHICAGO, INO	244 426	91 142	36 24	36 79	54 86	29 59	28 73	51 92	8 22	9	5 5
RANO RAPIOS, MICH	178 56	19 3	2	11	34 13	16 3	67 8	23 8	25 17	1	6
REEN BAY, WIS REENSBORO-HIGH POINT, N.C REENVILLE, S.C	54 165	8 27 5	3 9 2	14	10 30	11 11	20 67	9 19	13	1 5 2	2
AMILTON-MICOLETON, CHIC ARRISBURG, PA	66 157 220	5 19 37	5	2 10	17 20	11	20 99	13 7	6 3 43	7	3
ARTFORO, CONN	220 747 500	260	12 61 90	17 132	68 215	32 110	37 99	22 56 43	43 86 66	3 15 24	10 16
DNULUEU, HAWAII	590 2,642	184 682	90 249	83 306	118 598	48 247	134 211	43 343	66 660	24 81	21 67

					HORK AC	YIVITY	,	<del> </del>			
LOCATION	TOTAL	RESEAR	CH AND DEV	ELOPMENT	MANAGEM A OMINIS	ENT OR		PRODUCTION		NOT EMPLOYED	NO REPORT OF HORI
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (8)	OF R+D	TEACHING	ANO INSPECTION	OTHER		ACTIVITY
STANDARO METROPOLITAN STATISTICAL AREAS-CONTINUED											
IUNTINGTON-ASHLANO, W.VAKYOHIO - IUNTSVILLE, ALA	161 500	29 258	61	17	37	18	33	41	13	3	5
NOJANAPOLIS, IND	905	364	107	128 181	145 193	121 111	9 136	34 93	33 73	6 2 <b>6</b>	15 20
ACKSON, MICH	41 314	46	1 25	19	9 52	3 13	10 43	5 18	9 145	1	3
ACKSONVILLE, FLA	147 548	17 197	3	6	46	11	15	18	36	5	6 10
OHNSTOWN, PA	42	4	45 1	1	124	75	મુ <b>ં</b> 22	74 2	35 2	1 <b>4</b> 3	15
ALAMAZOO, HICH	405 775	155 218	58 85	73 101	98 176	65 90	91 118	23 98	23 115	9	6
ENOSHA, WIS	11	1		1	2		4	3		22	28 1
NFAYETTE, LA	1 • 345 277	720	423 1	207 3	219	143	169 34	80 32	82 177	47 3	28 3
NKE CHARLES, LA	136 310	21 125	7 19	9 56	35 70	7 43	23 63	45	8	1	3
ANSING, MICH	995	382	241	135	133	57	304	28 24	10 72	11 45	. 3 35
IS VEGAS, NEV	12 147	45	4	31	6 39	1 17	2 20	11	29 29	1 2	1
NHRENCE-HAVERHILL, MASSN.H NHTON, OKLA	86 25	15 3	1 1	5 2	11 5	8	35	8	6	3	8
WISTON-AUBURN, MAINE XINGTON, KY	14						6 8	1	8	1	2
MA, OHIO	449 34	16 <b>1</b> 4	104 1	50 1	48 7	22	134	15 11	55 2	18 2	18
NCOLN, NEBR	514 194	160 43	101 19	56 20	71 47	31	171	11	37	35	29
RAIN-ELYRIA, OHIO	140	51	2	10	23	18 13	45 37	12 16	39 5	3 6	5 2
NS ANGELES-LONG BEACH, CALIF NUISVILLE, KYIND	9,390 524	3,584 163	1,434 62	1,288 55	2 • 032 105	1,250 48	1,368 100	629 77	1,136 48	395 16	246
WELL, MASS	110 215	36 30	8 21	18	23	16	31	6	4	6	25
NCHBURG, VA	91	24	5	9 5	11 18	5 14	107 34	9	35 5	9	14
CON, GA	54 1.754	6 871	1 688	5 164	15 172	5 100	11 353	7 34	13 136	1	1
NCHESTER, N.H	19 62				4		10	2	2	112	76 1
MPHIS, TENNARK	382	14 81	11 42	3 30	12 69	6 38	29 103	44	· 55	1 10	5
RIDEN, CONN	6   545	1 178	1 127	46	1 78	1 35	117	1 24	2 110	1	
DLAND, TEX	608 878	11	3	8	96	13	5	46	425	26 14	12 11
NNEAPOLIS-ST PAUL, MINN	2 . 898	221 1,180	78 537	91 444	198 572	105 351	235 508	76 201	90 234	28 109	30 94
BILE, ALA	107 77	15 12	2 2	8 7	29 17	10 8	21 25	24 14	15	1	2
NTGOMERY, ALA	89 91	4	1	3	33	8	24	3	23	i	1
SKEGON-MUSKEGON HEIGHTS, MICH - 🚽	59	6 20		4 12	12 15	7	61 9	7	3 5	2 2	3 1
SHVILLE, TENN	478 18	157	107	29 1	81	47	140 7	16	44	24	16
W BRITAIN. CONN W HAVEN. CONN	39 1,190	4 620		4	5	1	25	2	2	2	2
w LONDON-GROTON-NORWICH, CONN	281	137	473 29	117 82	137 54	90 36	210 38	27 24	52 15	112	32 10
W ORLEANS, LA	1,278   14,870	271 4,637	154 2,318	9 <b>8</b> 1,649	177 3•367	64 1 • 590	222 2,374	124	412	35 673	37
MARK, N.J	4,462	1,993	645	896	1.127	771	317	472	293	172	435 88
RFOLK-PORTSHOUTH, VA	209	32	48	50 25	49 58	26 17	17 53	26	43 29	5	1 6
RWALK, CONN	202 49	79 3	7	34	53 i	36 7	18 5	9 18	30 7	9	4
DEN- UTAH	89 939	9 145	91	6	31	8	20	13	16		
AHA. NEBRIOWA	371	60	20	45 32	139	44 28	203 86	55 29	317	44	36 14
LANDO, FLA	290   1,242	111	15 85	60 : 210 :	88 345	55 207	28 107	23 185	24 106	8	8
NSACOLA, FLA — — — — — — — — — — — — — — — — — — —	103 263	29	7	4	27	12	14	19	9	2	3
ILACELPHIA, PAN.J	6,197	131   2,518	1,035	65 1•020	1.304	791	46 896	17 573	13 517	253	6 136
DENIX, ARIZ — — — — — — — — — — — — — — — — — — —	2,932	186	63 573	77 468	122 588	49 368	200 402	36 246	91 2 <b>5</b> 5	35 129	17 54
TTSFIELD, MASS	94 19	47	8	23	24	14	7	11	2	2	1
RTLAND, MAINE	69	10	3	1 4	19	10	3 16	11 7	1 10	4	3
RTLANO, OREGWASH	732	162	55	88	169	52	200	48	100	29	24
R.IMASS	676	220	162	40	101	47	183	56	40	45	28
E8LO, COLO	196	28	16	8 2	27	11	103 17	10	12	16	8
CINE, WIS	120 601	46 250	10 146	20 101	31 93	19 46	15 158	13	7	2	6
ADING, PA	133	36	1	15	27	18	26	23	46	23	19 3
CHMOND, VA	180 541	55   185	26 65	26 96	25 130	11 73	54 99	62	27 37	7 12	10 16
ANOKE, VA	46 1,752	834	3 341	297	8 329	3	19	1	11	3	1
CKFORO, ILL	51	13		7	12	207	203	169	102	73	42 1
CRAMENTO, CALIF	1,396	547	270	209	263	135	207	91			

ERIC"

					WORK A	CTIVITY					
LOCATION	TOTAL	RESEA	RCH AND CEV	/ELOPHENT		MENT OR STRATION		PRODUCTION		NOT EMPLOYED	NO REPORT OF WORK
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (8)	OF R+O	TEACHING	AND INSPECTION	OTHER		ACT I VITY
STANDARD METROPOLITAN STATISTICAL AREAS-CONTINUED											
SAGINAN, MICH	22	)   2		2	4	,	5	4			
ST. LOUIS, MOILL	20	750			6	3	6	4	5	1	1
SALT LAKE CITY, UTAH	2,252	759 213	303 130	329	540	247		280	216	85	54
SAN ANGELO, TEX	32	i			149	61	156	42	164	40	32
SAN ANTONIO, TEX	543	142	43	80	113	61	87	2 27	135	2 17	1 22
SAN DIEGO, CALIF	842	335	183	128	162	94	151	45	90	38	21
SAN FRANCISCO-DAKLAND, CALIF	1,471	683 2,850	328 1,564	218	247	152	248	55	114	70	21 54
SAN JOSE, CALIF	2,761	1,298	640	979 402	1,116	632 357	829	380	691	306	170
SAN JUAN, P.R	215	49	22	23	44	18	396 56	127 13	192	166	66
SAVANNAH, GA	437	162	55	75	78	48	88	23	33 44	8 30	12 12
SCRANTON, PA	118 67	24 12	7	14	42	17	16	17	13	5	1
SEATTLE-EVERETT, WASH	1,708	698	373	247	12 268	5 143	32 332	3	5	1	2
SHREVEPORT, LA	259	16	5	8	46	ii	14	83 42	193 128	73	61
SIOUX FALLS, S.OAK	34 45	6 2	2	4	4		14	3	6	6	7
SOUTH BEND, IND	312	96	77	8	10 31	3 15	.23	2	8		
SPOKANE, WASH	134	15	3	10	39	12	109 42	17 8	21	26	12
SPRINGFIELD, MO	66 80	8	2	5	28	io	7	6	21 12	2	5 3
SPRINGFIELD, OHIO	35		2	2	14	5	44	7	7	3	í
SPRINGFIELO-CHICOPEE-HOLYOKE,					2	1	27	1	3	2	**
MASSCONN	386	106	16	68	96	53	93	48	18	15	••
STEUBENVILLE-WEIRTON, OHIO-W.VA -	476 31	230	55	129	133	103	23	28	37	12	10 13
STOCKTON, CALIF	104	12	3	9	17	6	13	7	2	2	
SYRACUSE, N.Y	1,000	374	180	120	151	74	258	6 54	18 77	3	6
TAMPA-ST-PETERSBURG, FLA ]	220   315	38	10	22	52	9	41	23	43	61	25 11
TERRE HAUTE, 1NO	189	45 39	11	17	64	29	101	16	58	23	1
TEXARKANA, TEXARK	8				31	11	74 2	19	13	8	5
TOLEGO, OHIO-MICH	421	108	31	50	86	40	132	48	22	2 15	
TRENTON, N.J	156	20   793	470	16	34	17	40	12	43	4	10 3
TUCSON, ARIZ	721	250	152	265 84	273   74	187	150	60	106	98	35
TULSA, OKLA	719	167	34	114	170	38 74	221	11 72	230	53	27
TYLER, TEX	156 134	28	19	7	21	8	77	6	13	24	12 6
UTICA-ROME, N.Y	140	43	9	20	13	3	6	5	103	í	ž
VALLEJO-NAPA, CALIF	102	14	í	7	32 13	18	30	2	19	7	
WACD, TEX	125	25	7	13	19	7	32	5 6	39 25	10	<b>4</b> 8
WATERBURY, CONN	11,788	4.801 55	2,458	1,980	3.811	2,510	684	394	1.474	298	326
WATERLOO, IOWA	42	Ž	- I	31	61	32	13	42	10	5	
WEST PALM BEACH, FLA WHEELING, W.VADHIO	85	25	4	16	19	10	25 16	5	1 9	4	1
WICHITA, KANS	32 401	2			6	1	12	å	il	12	3 1
WICHITA FALLS, TEX	10		6	22	60	24	53	44	173	17	10
WILKES-BARRE-HAZLETON, PA	86	10	2	7	11	4	34		5		1
WILMINGTON, DELN.JMO WINSTON SALEM, N.C	2,594	1,166	386	581	660	413	90	10 309	216	5 i 93 ;	<b>4</b>
HORCESTER, MASS	195   341	81 85	42 54	24	26	20	51	11	18	3	60 5
YORK, PA	94	15		22	22	33	125	19	21	17	10
YOUNGSTOWN-WARREN, OHIO	. 106	18		13	16	8	27   43	10	13	3	4
OTHER LOCATIONS	57,101	16,552	7,436		$\Rightarrow$				14		2
			11730	6,835  1	1.580	5,023	14,369	4,059	6,230	2,629	1,682

<sup>(</sup>A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

LOCATION		SCIENTIFIC AND TECHNICAL FIELD								
	TOTAL	CHEMISTRY	EARTH	METEOROLOGY		Γ				
	ļ		SCIENCES	ACTEGROEDS	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES			
ALL LOCATIONS	11,000	11,000	10,300	10,600	12,000	11,000	9+200			
STANDARO METROPOLITAN STATISTICAL AREAS + - ABILENE, TEX	11.300	11,300	10,600	10,900	12,000	11.700	10+300			
AKRON, OHIO	9,000	11,500	10,000		11,600	9,600				
ALBANY-SCHENECTADY-TROY, N.Y ALBUQUERQUE, N.MEX	12,000	12,000	8,300		14,600	12,000				
ALLENTOWN-BETHLEHEM-EASTON, PAN.J ALTOONA, PA	10,200	12,400	10,000		13,600 11,800	13,000 8,300	10.700			
AMARILLO, TEX	9,600 12,800	9,000 12,600	10,000							
ANN ARBOR, MICH	11.600	11,000 10,000	9,800		14,400	13,700 11,800				
ATLANTIC CITY, N.J	10,100	10,000		9,500 10,000	10,400	10,000	10.700			
AUGUSTA, GAS.C	11,100 9,600	11.100 9.700	B,900	<b>4</b>	11,500					
8AKERSFIELO, CALIF BALTIMORE, MO	10,500 11,000	11.000 11.000	10,900 10,700		11,300	8,900				
BATON ROUGE, LA	11,000 11,000	12,000	10,600			12,000	10.700			
8EAUMONT-PORT ARTHUR, TEX	10,500 9,700	10,800	11,300 10,000							
BIRMINGHAM, ALA	11,830 11,300	11,800 10,000			12,000	12,000				
BOSTON, MASS	11,500	11,000	10,000	12,000	12,600	12,100				
BROCKTON, MASS	10,000 9,800	10,400								
BUFFALO, N.Y	9,300	11,000			11,800	9,700				
CEDAR RAPIOS, ICHA	9,700	10,000								
CHARLESTON, S.C	9,800	10,000	10,000		12,000	9,900	10.700			
CHARLOTTE, N.C	11,000 10,000 9,700	11,500								
CHICAGO, ILL	11.200	10,500	9.800	10,800	12,000	11,400	10,600			
CLEVELANO, OHIO	11.000	10,600	8,700 9,600	10,600	10,000	10,200 10,500				
COLUMBIA, S.C	9.800	9,700				12,200				
COLUMBUS, OHIO	11.000	11,400	9,400	*****	12,000	11,000	10,000			
OALLAS, TEX	11,700	11,000	12,000		12,000	10,500	****			
DAYTON, OHIO	11.000	11,100		4	11,700	11,700				
DENVER, COLO	11,000	10,000	11,500	11,600	11,000	10,000	10,600			
OETROIT, MICH	10,900 7,900	11.000	8,400		11.400	12,000 10,800				
OULUTH-SUPERIOR, MINNWIS	8,400 12,000	9,300 12,000			10,800	11 800	*****			
ERIE, PA	9,600 10,000	10,300				11,800	*****			
EVANSVILLE, INDKY	9.300 10.000	9,600 10,600	9,600				7,500			
ARGO-MOORHEAD, N.OAKMINN	9.000	8.700								
LINT, MICH	9,900	******								
ORT SMITH, ARKOKLA	10,300									
ORT WORTH, TEX	9,800	9.100	12,000		11,500	10,000				
ADSOEN, ALA	9,800	9,500		<b>4</b>	******		9+500			
ARY-HAMMOND-EAST CHICAGO, INO RAND RAPIDS, MICH	11.500 12.100 9.000	11,600		<del></del>						
REAT FALLS, MUNT	9,600 9,600	9,300		******						
REENSORO-HIGH POINT, N.C REENVILLE, S.C	9.200	9.800 9.600								
AMILTON-MICOLETOWN, OHIO	9,600	10,200	8-400	4-4-4						
ARTFORO, CONN	10,900	10,300	10,600	12,500	11,500	12,400				
OUSTON, TEX	12.000	11,000	12,000		10,500	11,000	10+600			
UNTSVILLE, ALA -++	11,700	12,000		4	11.700	11,400				
ACKSON, MICHACKSON, MISS	9,300 10,100		10,200		9,100	10,500				
ACKSONVILLE, FLA	9,800 10,800	9,000 10,700			11,000					
OHNSTOWN, PA	7,700			-	11,000					

ERIC Full text Provided by EBIC

148

		<u> </u>					
LOCATION		<u> </u>	SCIENTIFIC	ANO TECHNI	CAL FIELD		
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELOS
ALL LOCATIONS	10.700	10,300	12+000	12,000	10,100	9,000	11,100
STANOARO METROPOLITAN STATISTICAL AREAS	11+300	10,500	12+000	12,500	10,400	9,300	11,700
ABILENE, TEX							
ALBANY, GA	8,200	9,600		11,100			11.100
ALBUQUERQUE, N.MEX ALLENTOWN-BETHLEHEM-EASTON, PAN.J	12.500 12.000	10,800 11,300		11.600			11+800 12+100
ALTOONA, PA AMARILLO, TEX		6,300 		10,500			11.100
ANAHEIM-SANTA ANA-GARDEN GROVE, CALIF	10,100	11,400		12.000			13+000
ANN ARBOR, MICH	12.100	11.500		12.500	11.200	9,000	11.900
ATLANTIC CITY, N.J	11,000	10.000		10,900			10+100
AUGUSTA, GAS.C	12,900 9,600	8,500		10,500		**	11,000
BAKERSFIELO, CALIF BALTIMORE, MO	12,000	10,000	12,000	11,000			9+800 10+400
BATON ROUGE, LA	10.000			11.000			11,400 12,000
BEAUMONT-PORT ARTHUR, TEX							11,100
BINGHAMTON, N.YPA		11.300					11,800
BOISE CITY, IDAHO	13,800						
BOSTON, MASS	10,600	10,000	12.500	12.000	10,500	9.900	12+000
BROCKTON, MASS +			~				11,700
BUFFALO, N.Y	11.500	10.000		12,000	9+400		11,000
CEDAR RAPIOS, ICWA CHAMPAIGN-URBANA, ILL							
CHARLESTON, S.C	11,600 10,000	12,500		12.600			12,000
CHARLOTTE, N.C							10,300
CHICAGO, ILL	12.000	10,100	11,800	13,600	11,500	9,800	10,700
CINCINNATI, OHIC-KY,-INO	12.500 13.000	9,800		10,200 12,000			10,800
COLUMBIA, S.C							11+300
COLUMBUS, GAALA	10,600	10,000	12.000			*****	
CORPUS CHRISTI, TEX				12,000	11,300		10+000
OAVENPORT-ROCK ISLANO-MOLINE, IOHA-ILL OAYTON, OHIO	12,000	10,000	10,800	12.500		44- 4	12,000
OECATUR, 11L	9,500	11.500				<del></del>	11,200
DES MOINES, IOWA	11.700	10,400 9,400		10,400			10,600
OETROIT, MICH	10.800	10.000		11,800			11.200
DULUTH-SUPERIOR, MINNWIS	13,000	11.000					
EL PASO, TEX					[		
EUGENE, OREG	12 000	10,000					
FALL RIVER, MASSR.I FARGO-MOORHEAD, N.DAKMINN	11,000						
FITCHBURG-LEOMINSTER, MASS FLINT, MICH	10,300						
FORT LAUGERDALE-HOLLYWOOD, FLA							
FORT SMITH, ARKOKLA							
FORT WORTH, TEX	9,900	y 400					10,800
GAOSDEN, ALA	11,500						
GARY-HAMMOND-EAST CHICAGO. INO GRAND RAPIOS. MICH							10.600 11.500
GREAT FALLS, MONT							
GREEN BAY, WIS							
GREENVILLE, S.C						4	
HARRISBURG, PA	12,000	10,200					
HONOLULU: HAWAII	10.000	10.600		10,500		*****	9,600 10,300
HUNTINGTON-ASHLAND, W.VAKYOHID HUNTSWILLE, ALA		10,500		13+500			13,000
INDIANAPOLIS, IND	11.400	9,800					12,100 10,000
JACKSON, MISH	11,500					<del></del>	
JACKSONVILLE, FLA	11,000	10,500				-	10,700
JOHNSTOWN, PA				******		-	

LOCATION	TOTAL	s	CIENTIFIC	ANO TECHNICAL	FIELO		
		CHEMISTRY	EARTH SCIENCES	METEGROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
STANDARO METROPOLITAN STATISTICAL							
AREAS CONTINUEO KALAMAZOO, MICH	12,000	12,500					
KANSAS CITY, MOKANS	10.300	10,000		10,700	8,100	10,000	
KNOXVILLE, TENN	12,000	12,000	10.200		13,000	9,500	10,500
LAKE CHARLES, LA LANCASTER, PA	9,600	10,000	10,000				
LAMSING, MICH	10,800	11,500 10,000	10.200		10,200 10,500	10,000	11,000
LAS VEGAS, NEV	10,000	9,600					
LAWRENCE-HAVERHILL, MASSV.H LAWTON, UKLA	10,100						
LEWISTON-AUBURN, MAINE LEXINGTON, KY	10,800	10,500					
LIMA: OHI)	8,500		10,000				10,400
LITTLE ROCK-NORTH LITTLE ROCK, 4RK	9,700 10,500	9,600 10,800				8,600	10,000
LORAINE-ELYRIA, OHIO	10,000 12,500	10,500 11,800	11.000	11,300	14,000	13,000	12.000
LOWISVILLE, KYIND	10,500	10,800					12,000
LUBBOCK, TEX	9,300		9,200				
MACON, GA	9,600 8,600				11,200		
MANCHESTER, N.H	10,500	10.000	10,000		10,000	10,200	11,000
MAYAGUEZ, P.R	9,600 10,100	10:000					
MERIOEN, CONN	10,000	9,500	9,800	11,000			
MIOLAND, TEX	10.600 10.000	10.000	10,600				
MINNEAPOLIS-ST. PAUL, MINN MOBILE, ALA	11.000	11,500	9+200	10,400	9,600 11,400	10,200 11,500	10.600 10.300
MONROF, LA	10,100 8,400	9,800					
MONTGOMERY, ALA	8,700						
MUSKEGON-MUSKEGON HEIGHTS, MICH	10,700	11,500					
NEW BEOFORD, MASS	9,000				10,000	10,000	
NEW HAVEN, CONN	10,300	11,000	9,000		9,000	10,000	
NEW ORLEARS, LA	11,000	12,000	10,900		9,800 9,000	10,800	*****
NEW YORK, N.Y	12,000	12,000	10,500	10,500	12,000	12,500	11:000
NEWPORT NEWS-MANCTOMAN	10,300	10,000			9,800		
NORWALK, CONY	12,200	11,500			13,700		
OGOEN, UTAH	9,600	9,600					10,900
OMAHA, NEBRIOWA	10,200	9,800 8,400	10.600	10,000	9,300	8,900 12,100	
ORLANDO, FLA	11,000	10,900			11,100	13,000	
PENSACOLA, FLA	10,000 10,300	10,800				12,500	
PHILADELPHIA, PAN.J	11.300	11,200	9,300	11,000	11,300	12,500	10,600
PITTSBURGH, PA	10,000	8,700 11,400	10,300		10,800	11,000	9,300
PONCE, P.R	11,600	12.400					
PORTLAND, MAINE	8.000	10,000	9,800		8,200	9,800	10,300
PROVIDENCE-PANTUCKET-WARWICK, R.IMASS PROVO-OREM, UTAH	9,600 8,800	10,000			9,500	9,000	
PUEBLO, COLO	8,400	10,000					
RALEIGH, N.C READING, PA	10,000	10.000			12,000	10,300	9,600
RENO, NEV	9,000 9,800	8,830	10,800				
RICHMONO, VA	9,400	11,000					
ROCKFORO, ILL	12,000	12,400			12,500	10,000	
SACRAMENTO, CALIF	11.000	11,000	10.200		10,500	9,900	11.500
ST-JOSEPH, MO							
SALT LAKE CITY, UTAH	11,200	12,000	9,000	10,600	10,000	10,700 10:000	9,100
SAN ANGELO, TEX	10.000	9:600	10,500		9,900	8,700	
SAN BERNAROINO-RIVERSIDE-ONTARIO. CALIF SAN DIEGO. CALIF	10,800	10,300	9,900		11,700	10,600	11,000
SAN FRANCISCO-OAKLANO, CALIF	12,000	12,000	12.000	11,300	12,600	10,900	12,000
SAN JUAN, P.R	9,500	12,000 8,000	11,300	11,500	13,700	12,000	
SANTA BARBARA, CALIF	9,400	10,600	11.000		14.300	12,500	
SCRANTON, PA	8,300 11,000	10,200	10,600	11,000	11,600		
1		.57250	107000	11,000	111000	11.,700	10,600

LOCATION	SCIENTLES AND TECHNICAL FIELD								
	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER		
STANDARO METROPOLITAN STATISTICAL	-						FIELDS		
KALAMAZOO, HICH									
KENOSHA, WIS	11.500	10.000		12.900		*****	10,000		
KNOXVILLE, TENN	11.000	10.000		10,600					
LAKE CHARLES. LA							12,000		
LANCASTER, PA						*****			
LAKEDU: TEX	11.000	11.300		12:500	12,900		9.800		
LAS VEGAS. NEV LARRENCE-HAVERHILL. MASSN.H						*****			
LAHTON, OKLA LEWISTON-AUBURN, MAINE							~~~~~		
LEXINGTON. KY	11,700	10,600							
LIMA, OHIO	10,000			10,800					
LITTLE ROCK-NORTH LITTLE ROCK, ARK LORAINE-ELYRIA, OHIO	13,000	9.800		10.000		*****			
LUS ANGELES-LONG BEACH. CALIF	12,000	12,000	13,400	13 000	10 (00				
LOWELL, MASS	12,000			13.000	10,400	9,400	13.200 9.800		
LUBBOCK, TEX LYNCHBURG, VA					*****	******			
MACON. GA									
MANCHESTER. N.H	11.400	10.600		12.000	9+600		9,800		
MAYAGUEZ, P.R						*****			
MIAMI, FLA	12,900	9,300				4			
MICHANO, TEX	9,700	10,000				******	<b>8,</b> 100		
MINNEAPOLIS-ST.PAHI. MTMM 1	10,300 11,300	9.900		10.800		*****	9.700		
MONROE. LA		10.960	10,600	11,500	11.000	*****	10,8CO		
MONTGOMERY, ALA									
MUSKEGON-MUSKEGON HEIGHTS. MICH									
NASHVILLE, TENN	12,000	9.600					9,000		
NEW BRITAIN, CONN						******			
MEN LONDON-GROTCH-NORWICH. CONN	11,000	9,800 9,300		10,500			9,600		
NEW ORLEANS, LA	11.000	9.800		9.700			10.000 11.200		
NEWARK, N.J NEWPORT NEWS-HAMPTON, VA	12,600	11.000	11,600	14,200	11.000	9,500	12,400		
NORFOLK-PORTSMOUTH, VA NORHALK, CONN				******			12,000		
DDESSA, TEX						******			
OGOEN, UTAH	11,000								
OMAHA, NEBRIOWA	12,000	11,100				******	1D.000		
PATERSON-CLIFTON-PASSAIC. N.1	10.000	9.800	~~~~	12,000		<b></b>	10,700		
PENSACOLA, FLA						*	11.400		
PHILADELPHIA, PAN.J	12.000	10.000	11,000	12,500	9,600	9.500	11.500		
PITTSBURGH, PA	8,600 12,000	10,000	11.000	9,900 12,500	12,000		9.600		
PUNCE, P.R						<del></del>	12.000		
PORTLANO, MAINE	11.000	10,400							
PROVIDENCE-PANTUCKET-HARWICK, R.IHASS	8,800	9.300		9,600 12,000			9.500 9.700		
PUEBLO, COLO									
KALEIGH, N.C	10,400	9.200							
READING, PA				9,500					
RICHMONO, VA	12,000	9.400		10,800					
ROCHESTER, M.Y	12,000	9,700	11.300	12,200			11,000		
ROCKFORO, ILL	11,000	11,800					11,200		
SAGINAW, MICH				12,000		I .	11.100		
ST-LOUIS, MO-ILL	12,500	10,000		12.00D	10,500				
SAN ANGELO, TEX	11,000	8.800				******	10.700 12.000		
SAN ANTONIO, TEX	12.100	11.000		*****		******	9,000		
SAN DIEGO, CALIF	9,500	10.300		11,500		******	14,000		
SAN JOSE: CALIF	11.400 12.000	11.000	11.500 12.000	13.000	11,500	9.900	12,000 12,000		
SAN JUAN, P.R	11.000			13,700			13,600		
SAVANNAH, GA	11,000	10.700				<b>***</b> 1	14,000		
SEATTLE-EVERETT, HASH	12,000	10,100		12.000					
•	ſ	- 1	1	11,000			10▶800		

TABLE A-29.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS. BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION	TOTAL	TOTAL SCIENTIFIC AND TECHNICAL FIELD								
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSECS	MATHEMATICS	AGRICULTURAL SCIENCES			
STANDARO METROPOLITAN STATISTICAL										
AREAS -CONTINUED				į		ł				
HREVEPORT, LA	10,000	8,800	10,000			+				
IOUX CITY, IOWA-NEB										
IOUX FALLS, S.DAK	7,900									
OUTH BEND, INO	9,700	10,000			9,800	9,300				
POKANE, WASH	8,600	9,000								
PRINGFIELD, ILL	à:4Ū¢	•								
PRINGFIELD, MO	8,803									
PRINGFIELD, OHIO	9,300									
PRINGFIELD-CHICOPEE-HOLYOKE, MASSCONN	10,900	12,000				11,100				
TAMFORD, CONN	12,700	12,100			14,700					
TEU8ENVILLE-WEIRTON, OHIO-W.VA				<b></b>		<del></del>				
TOCKTON, CALIF	9,000									
YRACUSE, N.Y	11,200	11,000	9,000		12,500	11,000				
ACONA, WASH	9,000	8,400					~~~~			
AMPA-ST.PETERSBURG, FLA	9,500	9,000			10,500	9,900				
ERRE HAUTE, INC	9,500	9+200					<del></del> -			
EXARKANA, TEXARK										
OLEDO, OHIO-MICH	10,200	10,200			11,000					
OPEKA, KANS	9,700									
RENTON, N.J	12,000	12,000	9,400		13,400	12,000				
UCSON, ARIZ	10,C00	8,000	9,500		10,500	8,800	10,000			
ULSA, DKLA	11,700	11,000	12,000		11,500	11,600				
USCALODSA, ALA	9,600									
YLER, TEX	10,000		10,200							
TICA-ROME, N.Y	9,500				9,500					
ALLEJO-NAPA, CALIF	9,900			<b></b>						
ACO, TEX	9,800		11. 300	12 100	12.500					
ASHINGTON, D.CMOVA	12,600	11.800	11,700	12,100	12,500	13,600	13,300			
ATERLOD, IOWA	10,600	11.000		<b></b>						
EST PALM BEACH, FLA	9,200									
HEELING, W.VAOHIO	10,600									
ICHITA, KANS	9,000	;	10,000		•		•			
ICHITA, KANS	10,000	9,500	10,000			8,500				
ILKES-BARRE-HAZLETON, PA	7.800									
ILMINGTON, DELN.JMD	13,500	13,900			14,000	11.400				
INSTON-SALEM, N.C	10,400	11,300				11,400				
ORCESTER, MASS	10,400	10,300			0.200	10.000				
ORK, PA	9.200	8,700			9,200	10,000				
OUNGSTOWN-WARREN, OHIO	8,700	9.800								
CONSTRUCT ANALYSIS OUT	69700	7,000				<u> </u>				
<b>:</b>		1	, <del></del>							

152

TABLE A-29.—MEDIAN ANNUAL SALARIES OF FULL TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND FIELD, 1964—CONTINUED

LOCATION			SCIENTIFIC	AND TECHNI	CAL FIELD		
200411011	RICLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELOS
STANDARD METROPOLITAN STATISTICAL							-
AREAS CONTINUEO						1	•
SHREVEPORT, LA							
SIOUX CITY, IOHA-NEB							
SIOUX FALLS, S.CAK							
SOUTH REND, INO							
SPOKANE, HASH							
SPRINGFIELO, ILL					i		
SPRINGFIELO, MO							
SPRINGFIELD, GHIO		10.000					10.000
SPRINGFIELO-CHICOPEE-HOLYOKE, MASSCONN STAMFORO, CONN							11.700
STEUBENVILLE-WEIRTON, OHIO-W.VA							
STOCKTON, CALIF							!
SYRACUSE, N.Y	13.000	10.700		9,600			11,000
TACOHA, WASH		9,800					
TAMPA-ST.PETERSBURG, FLA	8.700	9,500					8,5C0
TERRE HAUTE. INC	10,500						
TEXARKANA, TEXARK				·			
TOLEDO. OHIO-MICH		8,700					10,500
TOPEKA. KANS		12,000					
TRENTON: N.J	11.6CO	10,800		10,800			12,200
TUCSON. 4R17	10,400	10,000		10,500			12,600
THI SA. GKIA				!			12,600
TUSCALOOSA, ALA							
TYLER. TEX							
UTICA-ROME, N.Y							
VALLEJO-NAPA, CALIF							
HACO, TEX					12.600	10.000	74 000
HASHINGTON, O.CHDVA	12,500	12,500	14,000	14,500	13+500	10,000	14,000
WATERSURY, CONN							10,200
WATERLOO. 10WA							
WEST PALM BEACH, FLA							
WHEELING, W.VAOHIO	] ======	11,000					
WICHITA, KANS WICHITA FALLS, TEX	]	11,000					
WILKES-BARRE-HAZLETON, PA	]						
WILMINGTON, DELN.JHD	12,000	10,600		15,500			12,900
WINSTON-SALEM, N.C	10,300						
WORCESTER, MASS	9,500	10,300		i			
YORK. PA							
YOUNGSTOWN-WARREN, OHIO			<u> </u>				
OTHER LOCATIONS	9,700	9,600	11,000	10,800	9,800	8,000	10,000

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

		т——					
		1	utcyser	OGCOEE			
			HIGHEST	UEGKEE		LESS THAN	NO REPORT
LOCATION	TOTAL					BACHELOR'S	OF OEGREE
		PH-0-	PROFESSIONAL	MASTER*S	BACHELOR S	OEGREE	
		<u> </u>	MEDICAL				l
ALL LOCATIONS				i —	i ———		<del></del>
ALL LOCATIONS	11,000	12,000	15,500	10,000	102 000	10,300	10.800
STANDARO METROPOLITAN STATISTICAL AREAS	11,300	12,500	15,500	10,400	10, 300	10.500	
ABILENE, TEX		-	137300	107700	107 300	10,500	11,000
AKRON. OHIO	9,000	12 200	<del></del>	7,300	10.000		
ALSANY, GA		12,300		10,100	10.200		
ALBANY-SCHENECTADY-TROY, N.Y ALBUQUERQUE, N.MEX	12,000	14,000	16,800	9,900	10,000		
ALLENTOWN-BETHLEHEM-EASTON, PAN.J	12,300	13,200		11,200	11.300		<b></b>
ALTOONA, PA				10.000	9,200		
AMARILLO, TEX	9,600	9,900		8,500	10,200		
ANN ARBOR, MICH	12,800 11,600	15,400	16,500	12,500 9,500	11,600		<b></b>
ASHEVILLE, N.C	9,600	12,000		9,000	9,000 9,800		
ATLANTIC CITY, N.J	10,100 12,100	11,000	15.500	9,400	10,000	*****	
AUGUSTA, GAS.C	11,100	13,000		10,500	10,000		
BAKERSFIELD, CALIF	9,600	10,500		8,000	8,400		
BALTIMORE. NO	10,500	12 500	13.500	10,100	10,800		<b></b>
BATON ROUGE, LA	11,000	12,500	13,500	10,200 10,600	10.000 10.000		
BAY CITY, MICH BEANMONT-PORT ARTHUR. TEX	11,000	11,600					
BILLINGS, MONT	10,500 9,700	12,300		11,000	9,800		
BINGHAMTON, N.YPA	11,800	12,300		9,300 11,500	10.600		
BIRMINGHAM, ALA	11.300	12,500	18,000	9,400	8,900		
BOSTON: MASS	11,500	12,000	12•500	11-000	10 600		
BRIOGEPORT, CONN	10.000	10,000	120:00	11,000 10,000	10,600 10,000	10,600	10,000
BROCKTON, MASS BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	9,800 9,300						
BUFFALO, N.Y	10,800	12,300	15,200	10,000	9,500		
CANTON, OHIO	9,700			8,200	10,000		
CEDAR RAPIDS, IOWA	9,600	10,200		8,900	9.600		
CHARLESTON. S.C	11,000 9,800	11,500		10,200 7,600	9,000 9,800		
CHARLESTON, N.VA	11,000	13,500		10,000	9,800		
CHATTANOOGA, TENNGA	10,000 9,700	10,600		8,500	10,600		
CHICAGO, ILL	11.200	12.800	18,000	8,200 10,000	9,200 10,000	10,500	10,800
CINCINNATI. OHIO-KYINO	10,700	12,500	15.500	9,800	9,800		
COLORAGO SPRINGS	11,000 10,300	12,700	16,000	10,300	10,000		
COLUMBIA: S.C	9,800	10,000		9,000 8,300	10+600 9+800		
COLUMBUS, GAALA	10,600						
CORPUS CHRISTI. TEX	11.000 10.000	11,900	14.500	9,800 9,800	10.000 9.800		
DALLAS, TEX	11,700	13,000	15,000	11.000	10,800		
DAVENPORT-ROCK ISLANO-MOLINE, IOWA-ILL	9,200 11,000	13.700		8,200	9,800		~~-
OECATUR, ILL	10,800	12,700		10,600	10,300		
OENVER, COLO	11,000	12,000	15,000	10,300	10.300		
OETROIT, MICH	10,000	10,500	18,000	9,000	11,000		
OUBUQUE+ IONA	7.900			10,000	10,000	12,000	10.200
DULUTH-SUPERIOR, MINNWIS	8,400	9.700		8,000	7,500		
EL PASO. TEX	12•000 9•600	12,300	15,000	8,200	9,300 9,300		
ERIE, PA	10,000	11.500		8,500	9,600		
EVANSVILLE, INOKY	9•300 10•000	10,500			7,500		
FALL RIVER, MASSR.I		13,000		8,800	9,000		
FARGO-MOORHEAO, N.OAKMINN	9.000	9,900		8,000			
FLINT, MICH	9.900	10,800		9,100			
FORT LAUDERDALE-HOLLYWOOD, FLA	10,300			9,100			
FORT SMITH, ARKOKLA	9,800	9 200			10.700		
FORT WORTH, TEX	10.800	9,200		8,500 10,000	10.700		
FRESNO, CALIF	9.800	10,000		8,900	9,800		
GALVESTON-TEXAS CITY, TEX	11.500	12,600		11.000			
GARY-HAMMOND-EAST CHICAGO, INO	12.100	14.000		11,000	10,500		
GRAND RAPIDS, MICH	9.000	9,300		7,700	9,500		
GREEN BAY, WIS	9•600 9•000						
GREENSBORD-HIGH POINT, N.C	9 • 200	9,500		8,300	8,100		
GREENVILLE, S.C	8,000	10.000			9,500		
HARRISBURG, PA	9•600 9•300	10,000		7.500 8.500	10,000 9,000		
HARTFORD, CONN	10,900	13,000		10,500	10,400		~
HOUSTON, TEX	10 • 300 12 • 000	11,100	15.000	9,600	9,000		
HUNTINGTON-ASHLANO, W.VAKYOHIO	9,000	13,000	15.000	11,300	10,800 8,700	12,000	13,900
HUNTSVILLE, ALA	11.700	14.500		11,800	10,300		
JACKSON, MICH	10 • 500 9 • 300	12,600	17,800	9,600	9,800		
JACKSON, MISS	10 100	10,300		9,700	10,100		*
JACKSONVILLE, FLA	9.800			9,100	9,0 <b>0</b> 0		
JOHNSTOWN, PA	10 • 800 7 • 700	11,900		10,300	10,000		<b></b>
ŀ		- 1					

LOCATION		HIGHEST DEGREE					
LOCATION	TOTAL	PH.0.	PROFESSIONA MEDICAL	AL MASTER'S	BACHELOR .	BACHELOR DEGREE	
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED			<del> </del>		-	<del></del>	
KALAMAZOO, MICH	12,000 10,300	12,800		10,500	10,800		
KNOXVILLE. TENN		11,600	18,500	9,400	9,600		
LAFA (C) (C) (A)	12,000	12,500		11,000	11,100		
LANCASTER, PA	9,900 9,600			9,400	10,200		
CANSING BILL:	10,800	11.500		8,500	10,000		
LAREDO, TEX	11,000	11,600		8,700	9,200		
FUNCTION TO A SECULIAR SECULIA	10,000			10,300			
	10,100			8,500	9,800 10,600		
LEMISTON-AUBURN, MAINE			~~~~				
	10,800 8,500	11,000	15.500	8,500	7,900		
LINCOLN, NEBR	9,700	10,200		7,500			
	10,500 10,000	11,300		8.400	9,500		
LOS ANGELES-LONG BEACH, CALIF	12.500	11,000	16,500	13.000	10,000		
	10,500	12,000		9,000	11,700 9,500	11,400	12,000
LYNCHBURG. VA	10,000 9,300	9,500		9,300	9,800		
'ACUN'	9,600	8,600		8,700			
MADISON, WIS	8,600 10,500	11,300	14-000				
171AUUEL			14.000	9,300	8,600		
MEMPHIS, TENNARK	9,600	10,200	17 700				
748011 PLA			17,700	7,500	9.300		
'+OLAMO' 1EX	10,000	10,200	16.300	8,000	9,800		
INNEAPOLIS-ST. PAUL. MINN	10,000	11,000		9,300	11,000		
IVOILE: ALA I	10,100	12,300	14,000	10,000	9,300 10,000		
ONTGOMERY. ALA	8,400				9.800		
ONCIE: 140:	8,700	10.000			8,400		
	10,700	10,000		7,800			
CH DEUFUKU. MASK	10,000	10,500	16,000	8,000	10.700 9.000		
EM BRITAIN, CONN	9,000						
EW LUNUUN-GKOION-NODLICH COMM	10,300	10,500	14,000	9,300	10,000		
EN OKLEANS, LA	11,000	12,300	17,400	10,000	9.500		
	12,000	13,000	15,500	10,000	10,300		
FAFORI MEMS-HAMPION. VA		14,400	19,500	11,000	10,200	10,900	12,000 11,000
/NWALK. CONN	9,000	8.700		9,800 8,100	10,000		
/CJJA1   EX		14,700		12,200	10,000		
KLAHOMA CITY. GKIA	9,600			8, 300	9,500		
MANA NEBRATIONA	1	10,600	14,000	9,500	10,900		
TERSON-CLIFTON-PASSAIC N.	1,000	10,600		8,400 10,600	10,300		
793AUULE: PIΔ = = = = = 1 ↑		13,700		10,300	10,000		
ILAOELPHIA. PAN. 1		12,100		9,500	9,500		
VERLAD AKIZ 1 4		12,600	15,000	10,300	9,500 10,200	11,000	
TISFIELO. MASS 1		10,300	19,30D	8.700	10,000		10,300
MCC PAR		15,500		11,100	10,200		
RTLAND, OREGWASH	· 1 7						
PASOCUTE-LUMBINCKET-MUSHICK D + "Wacc		10,700	17,000	8,900	8,400 9,600		
88LO. COLO		9,000		8,500	10,000		
,18E • B13	8,400   -			7,800			
NOING. PA		0,600		9,200	9,500		
	9,000   1	.0,000		8,600	8,500 8,500		
MINORDY VA		2,300	14 000	8,400	8,600		~~~~~
70531EK. Nat	9,400 -		14,000	9,400	9,500		
*** UNU		3,500	12,000	11,000	11,000		
INAW. MICH + 11	. 000 1	2,700		10,000	10-000		
703Erne NU					10.000		~~~~
T LAKE CITY. HTAH 11	200 1	2,500	15,000	10-500	7		~~~~
ANUCLU: 1EX	•100 j i	0,600	15.000	9,500	10,000		
BERNAROINO-RIVERSIDE-ONTARIO CALLE	•000 1	2,100		9-100			
U1COUT LALIE	800 1	1.800		9,100	9,900		<del></del>
JOSE, CALLE 12:		3.000	15,000	10,500	10,200		
JUAN P P K   44'	•60D 13	3 600		10,400	10,800 11,500	12,000	12,000
ANNAHA GA 12		700 200		6,700	8,000		
ANTON. PA	•400			12.000 8.400	10,600		
**** CACUCALL MASIN		000			9,500	II.	
11,			13,000	10,000			

TABLE A-30.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARD METROPOLITAN STATISTICAL AREA AND HIGHEST DEGREE, 1964—CONTINUED

LOCATION			HIGHEST	DEGREE		LESS THAN	NO REPOR
COCATION	TOTAL	PH.D.	PROFESSIONAL MEDICAL	MASTER*S	SACHEL OR S	BACHELOR®S DEGREE	OF DEGRE
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED							
SHREVEPURI, [A	10.000			9,600			
SIOUX CITY, IONA-NEB				9,000	10.000		
SIOUX FALLS, S.DAK	7,900					<b></b>	
SOUTH BENO, IND	9,700	10,500		7,900	9,000		
SPOKANE, WASH	8,600	9,000		7,800	9,800		
SPRINGFIELD, ILL	9,900				9,000		
SPRINGFIELD, MO	8,800	9,400					
SPRINGFIELD, OHIO	7.300						
SPRINGFIELD-CHICOPEE-HOLYOKE, MASSCONN	10,900	12,000		10,600	10,100		
STEUBENVILLE-WEIRTON, OHIO-W.YA	12.700	14,400		11,400	10,000		
STOCKTON, CALIF							
SYRACUSE, N.Y	9,000	9,000		9.000			
TACOMA, WASH	11,200	11,700	16,000	10.300	11,000		
AMPA-ST.PETERSBURG. FLA	9,000	10,000		8.700	8,500		
FERRE HAUTE, IND	9.500	10,100	~	7,800	9,300		
EXARKANA, TEXARK	9.500	10,500		8,400	8,100		
TOLEDO, OHIO-MICH		11 500					
TOPEKA, KANS	10,200	11,500		9,600	10.000		
	9,700 12,000	10,500		7:400	8,600		
TUCSON, ARIZ	10.000	13.000 10.500		10.600	10,400		
「ULSA, OKLA	11,700			8,500	9,600		
「USCALOOSA, ALA	9,600	12,600		11.700 j	10,800		
'YLER, TEX	10.000	9,800					
ITICA-ROME, N.Y	9,500	10,400	~~~~	8,500	10,200		
ALLEJO-NAPA, CALIF	9,900			9,000	9,100		
ACO, TEX	9.800	9,800		9,300			~
ASHINGTON, D.CMDVA	12.600	14.000	16,200		10,000		
ATERBURY, CONN	10,600	13,000	101200	12,100	11,700	11,700	12,500
ATERLOO, 10WA	9,200			10,400	9,800		
EST PALM BEACH, FLA	10.600	12.100					
HEELING, W.VAOHIO	9,000						
ICHITA, KANS	10,000	11,400		8,500	10,000		
ICHITA FALLS, TEX					101000		
ILKES-BARRE-HAZLETON, PA	7,800			7.000			
ILMINGTON, DELN.JMD	13,500	14,400		12,000	12,000		
INSTON-SALEM, N.C	10,400	10,300		9,500	10,000		
ORCESTER, MASS	10,000	10.300		8,100	8.700		
ORK, PA	9,200				9,100		
OUNGSTOWN-WARREN, OHIO	8,700			8,800	8,900		
OTHER LOCATIONS	10,000	11.000	15,000	9 700			
_ <del></del>	-07 000	117000	13,000	8,700	9,200	9,800	10.000

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

		METROPOLITAN STATISTICAL AREA AND TYPE OF EMPLOYER,						1964				
100:77:-		<u> </u>				TYPE O	F EMPLOYE	R				
LOCATION	TOTA	L EOUCA TIONA INSTI TUTIO	AL GOVE	RN- GO	THER VERN- ENT	NONPRO ORGANI TION	ZA- AN	JSTRY IO NESS	SELI EMPLOY		HER	NO REPORT OF TYPE OF EMPLOYER
ALL LOCATIONS	11,00	00 9,6	00 11.	000 9	,000	-						
STANDARD METROPOLITAN STATISTICAL AREA	S 11,30	9,9			,600	12,0		000	15,00	00 11	000	11,000
ABILENE, TFX	9,00		<del> </del>			12,0		000	16.00	00 11	400	11,800
ALBANY-SCHENECTADY-TROY		-				<del></del>	ii,	500				
ALLENTOWN-RETHIEHEM-EASTON	12.30	0 11.0	- 1 7.	300 11	300 300		- 14,0	000		-		
AMARILIO, TEV						13,50	- 12,0	υου		-	 	
ANN ARBOR, MICH	12,80	8,70	0	- 1			- 10,0	000		,		
ATLANTA, SA	9,600	5	1				- 12,8	00				
AUGUSTA, GA-S-C	12,100		11.0	00 9,	400		- 11.0			-		
BAKERSFIELD. CALLE	7,600	1,	0 10,2	00			- 11.5	,		-		
BATON ROUGE.	10,500	8,20	0 10.0	00			.   1193	(				
BAY CITY, MICH	11,000	10.00	0 10,1	00		10,80	0 12.0	00				
	10,500	8,60	0		- 1		-					
BINGHANTON, N.YPA	11,800	9,000	o		1		- 10,00	00				
MOSTON, MASS	11,300	12,000				10,600	10.50	o				
BROCKTUN. MASS	11,500	8,000	,00	0 9,2	00	12,000	13.00	. 1	16,000	10.0		
BUFFALO, N.Y BUFFALO, TEX	9,800 9,300		·	-				0				
CEDAR RAPIDS. IOMA	10,800 9,700	9,300	10,10	0 13,5	00	13,400		- 1				
CHAMPAIGN-UPBANA, ILL	9,600 11,000	8,900		-			10,80	0				
CHARLESTON, M.VA	9,800 11,000	9,000		-	1		11,00	-   -				
CITY FRIDUIGA. LEDN _CA	10,000	7,800		-			11,50	)   -				
CHICAGO, ILL CINCINNATI, OHIO-KYINO	11,200	10,500	11,600	,	- 1	12,200	10,800	)   -			- 1	
COLORADO SPRINGS	10,700	9,000	10,600	)		13,000	11,500	)   -	9,800	11,80	0	
COLUMBUS. GAALA	9,800	8,670 9,763				11,500	11,500	. , -	0,000		-   .	
	10,600	10,400	10,600	·							-   :	<del></del>
CORPUS CHRISTI, TEX	10,000	9,700			-	12,000	12,000				-   -	
OECATUR. TIL	9,200	7,900 9,500	10,600		-	9,000	12,000	1.	2,000		-   -	
OES MOINES. TOWA	10,800	10.000	12,100		- 1	10,000	11,000				- 1	 
OETRUIT, MICH	10,000	8,900	11,200	9,50	- 1	11,000	11,400	12	2,000		- 1	
	7,900 8,400	9,100	10,000	9,50	0   :	11,500	11,700	15	,000		1 -	
EL PASU. TEX	12,000	8,300 10,900	13,700		-   -	13,200	9,600				- 1	
EUGENE, OREG	9,600	8,500 7,300			•   -		12,500				-	
FALL RIVER, MASSR. I	9,300	8,400	7,300		·   -		11,000				-	
FITCHBURG-LEONINGTED HACE	9,000	9,000			·   -		11,200	1			-	
FORT LAUDEROALE-HOLE VHOOD	9,900	9,100		~	-			1				
FORT WAYNE INO					_		10,400					
FRESNO. CALIF	9,800 10,800	7,300 8,500			1		12,000					
	9,800	9,000	9,400	10,000			12,300 10,200				1	·
		11.000			1		12,000					
GREAT FALLS. HONT -	9,000	7,600 7,600			,		13,500					
GREENSBORO-HIGH POINT N. C	9,000 -						10,700					
HAMILTON-HIDOLETONY ONTO							10,200					
HAR TFORD CONN	9,300	9,400					12,000 11,700					
HOUSTON, TEX	0,900	7.900		10,000	<b>.</b> .	,000	11,500 12,000					
HUNTSVILLE. ALA - W.VAKYOHIO	2,000 i	0.200	10,000	11,000		,200	10,800				i	
INDIANAPOLIS, IND 1 JACKSON, MICH - 1	1,700 -		12,000				9,600 11,000	15,0	.	~~~~		
	9.300 -		10,400	7,500			11,400		· <del>-</del> -   .		l .	
JERSEY CITY. N.I	800	-	11,000				10,200		·   .			
						j	10,000		-		~~~	
		•	,			- 1			-			

ERIC TOTAL PROVIDED BY ERIC

		TYPE OF EMPLOYER							
LDCATION	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT		NONPROFIT ORGANIZA- TIONS		SELF-	OTHER	NO REPORT OF TYPE ( EMPLOYER
STANDARO METROPOLITAN STATISTICAL AREAS - CONTINUES				<del> </del>					<del> </del>
ALAMAZOO, MICH	12,000	9,000				13,200			
ENOSHA, VIS	10,300	8 • 400	10,000		10.800	11,400			
NOXVILLE, TENN AFAYETTE, LA	12,000	9,500	11,800	ľ	12,200	13 400			
AKE CHARLES, LA	9,900	8.000				12,600			
ANCASTER, PA	9,600 10.800	7,200 8,400				10,200			
ANSING, MICH	11,000	11,000	10,500	1		11,700			
AS VEGAS, NEV	10.000								
AWRENCE-HAVERHILL, MASSN.H	10,100	8,500	10,000			10.100			
AMTON, OKLA						11,000			
EXINGTON. KY	10,800	10 700							
IMA. OHIO	8,500	10,700	11,300						
INCOLN, NEBR	9,700	9,500	10,300			11,000			
DKAINE-ELYRIA, OHIO	10,500	11,000	10,400			10,800			
DS ANGELES-LONG BEACH, CALIF	12,500	10,100	11,100	11,000	15,000	10,500			
DUISVILLE, KYIND	10,500	9,800			13,000	13,500	20,000	10,000	
J88OCK, rex	9,300	8+000				10,800			
/NCH8URG. VA	9,600	9,200 8,200				9,600			
ACON, GA	9,600					11,200			
NCHESTER, N.H	10,500	11,000	10,600	9,200		10,000			
YAGUEZ, P.R	9,600	9,500							
MPHIS, TENNARK	10,100	9,000	11,300	i		10.800			
AMI, FLA	10,000	9.300	10 600						
OLANO, TCX	10,600		10,600			13.200 10.600			
NNEAPOLIS-ST.PAUL. MINN	10,000	9,100	11,800	9,400		10,500			
BILE, ALA	11,000	10,500	10.100	9,000	11,500	12.000			
NROE, LA	8,400	8,300				11.500 9.100			
NCIE, INO	8,700								
SKEGON-MUSKEGON HEIGHTS. MICH	8,800	8,500							
SHVILLE, TENN	10,000	10.000	11,000	7,100		12,000			
W BRITAIN, CONN	9.000								
W HAVEN, CONN	9,000	9,500	11,000	11,300					
W CCNDUN-GROTON-NORWICH, CONN	11,000	9.300	10,500			12.000			
W YORK, N.Y	10,300	9,500	10,100		[	10.800			
MARK: N.J	12,000	8,800	10,900	9.700	11,500	13,800	18+000	12:000	12.500
MPORT NEWS-HAMPTON, VA	10,300		10,300		9,000	12,800	16+000		
RWALK, CONY	9,000	7,500	10,100			11,700			
:33A, IEX	10,000					13,000			
DEN, UTAH	9,600		10,900			10,200			
MA. NEARIOWA	10,200	9.800	10,600			10,700			
ANDU, FLA	11,000	7,500	12,500   10,300			10,800			
	11,300	8 • 500			12,500	11,700			
RIA,	10,000	8,300	10 600			10,500			
	11.300	9.600	10,600	9,000	10,900	11.500			
TSRIBCH DA	10,000	9.200	10.000	8,200		11,000	18,000	10.000	
TSFIELD, MASS	11,900	10,100	11,700		10,600	12,200			
I.P. D.W = = = = : : : :						12,000			
TLANO, OREGWASH	8,000					11,400			
VIDENCE-PAWTUCKET-WARWICK, R.IMASS - 🗐 '	9,600	9,100	11.000	8 • 200	11,200	10,200			
VO-OREM, UTAH	8,800	8,600				11,500			
INE, WIS ,	8,400								
EIGH, N.C	0.000	10,000	10,000	8.700		10,500			
	9,000	7,800				9,100			
1MDNO, VA	9,800	\$,600	10,000						
NOKE, VA	0 400	10,000		8 • 4 00		11,700			
16316K N.Y 1	2.00	10.000				13.000			
RAMENTO, CALIF		10.800				10,200			
NAW. MICH	•	10,800	9,800	11,500		11.800			
OUIS- NO -III									
LAKE CITY. UTAH;		10,000	10,300	8.300	10.000	12.000			
ANGELO, TEX	1	10,000	10,700	7.500		10,800			
ANTONIO, TEX	0.000	7,200	10,600		11,200	10.500			
DIFGU. CALLE =		10,000	10,600	10.000	17.000	•• •••			
FRANCISCO-DAKLAND, CALIF 1	0.900   2.000	9,500   11,000	10,600	11.500	10,000	13.000			
JUSE, CALIF 1	2,600	10,900	12.500	10,500	11 000	1	17,000		
111AN. D D		8,000	10,600	8,000			15,000		
JUAN, P.R	9 • 500			0,000					
JUAN, P.R	2,200	9.500				14,500			
JUAN, P.R	2,200			-		14,500 10,000		1	

TABLE A-31.—MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS, BY STANDARO METROPOLITAN STATISTICAL AREA AND TYPE OF EMPLOYER, 1964—CONTINUED

					TYPE OF EMP	LOYER			
LOCATION	TOTAL	EDUCA- TIUNAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GUVERN- MENT	NONPROFIT ORGANIZA- TIONS	INOUSTRY AND BUSINESS	SELF~ EMPLOYEO	OTHER	NO REPORT OF TYPE O EMPLOYER
STANDARO METROPOLITAN STATISTICAL ARFAS - CONTINUED									
SHREVEPORT, LA	10,000					10,000			
SIOUX CITY, IOWA-NEB									
SIOUX FALLS, S.OAK	7,900								
SOUTH SEND, INO	9,700	9,700				10.000			
SPOKANE, WASH	8,600	7,500				11,000			
SPRINGFIELD, ILL	9,900			9,600		117000			
SPRINGFIFLD, MQ	8,800	8,400	!						
SPRINGFIELD, OHIO	9,300	8,700							
SPRINGFIELO-CHICOPEE-HOLYOKE, MASSCONN 🚽	10,900	8,400				12,100			
STAMFORO, CONN	12,700					13,000			
STEUBENVILLE-WEIRTON, OHIO-W.VA									
STOCKTON, CALIF	9.000	8,200							
SYRACUSE, N.Y	11,200	10,500				12,000			
TACOMA, WASH	9,000	8,100				9.800			
TAMPA-ST.PETERSBURG. FLA	9,500	8,500				10,500			
TERRE HAUTE, INO	9,500	9,300				9,600			
TEXARKAYA, TEXARK									
TOLEOO, OHIO-MICH	10,200	9,300				11,000			
TOPEKA, KANS	9,700	7,000		9,500	14,000	11,000			
TRENTON, N.J	12,000	9,200		9,500	12.500				
TUCSON, AXIZ	10,000	9,600	10.300		12,500	12,400			
TULSA, OKLA	11,700	8,600				11,200	i		
ruscaloosa, ala	9,600	9,600				12,000			
TYLER, TEX	10.000								
JTICA-POME, N.Y	9,500	8,000	11,700			10,000			
/ALLEJO-NAPA, CALIF	9,900								
ACO, TEX	9,800	8,800							
MASHINGTON, 0.CMDVA	12,600	10,000	12,900	11,000	14.800	11,400			
MATERBURY, CONN	10,600				14,500	13,800	18,000	14,000	
MATERLOO, IOWA	9,200	9,200				10,800			
IEST PALM BEACH, FLA	10,600	10,600				10.300			
MEELING, W.VAOHIO	9,000	107000				10,200			
IICHITA, KANS	10,000	8,200							
IICHITA FALLS, TEX		87200				10,300			
ILKES-BARRE-HAZLFTON. PA	7,800		1						
ILMINGTON, DELN.JMO	13,500	7,200 9,600							
INSTON-SALEM, N.C	10,400	9,000		- 1		13,800			
ORCESTER, MASS	10,400					11,400			
ORK, PA	9,200	8,900			7,800	13,000			
OUNGSTOW WARREN, OHIO	8,700	7,400	1			10.200			
	01700	7,600				9,800			
OTHER LOCATIONS	10-000	0.000	10.000	2 000					
	10,000	9,000	10,000	3,000	10,400	11,000	12,000	10,000	10.000

NOTE - NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

**16**0

		WORK ACTIVITY								
LOCATION	TOTAL	RESEAR	CH ANO OFV	ELOPMENT	MANAGEM AOMINIS		TEACHING	PRODUCTION ANO	OTHER	NO REPORT OF WORK ACTIVITY
		TOTAL (A)	BASIC RESEARCH	APPLIEO RESEARCH	TOTAL (B)	OF R+O		INSPECTION		
ALL LOCATIONS	11,000	11,000	11,000	11,000	14,500	15,500	8,900	9,800	10,500	11,200
STANOARO METROPOLITAN STATISTICAL AREAS	11,300	11,100	11,300	11,300	15,000	16,000	9,000	10,000	10,600	11,800
8ILENE, TEX	9,000	10,500	1',500	10,500	14,500	15,000	5,400 9,000	10,000	9,800 10,700	
LBANY, GA	12,000	13,000	13,600	12,500	16,000	17,000	9,100	9,630	11,000	
LBUQUERQUE, N.MEX	12,300	12,60C 11,000	13,200	12:300 10:800	14,300	15.300 15.500	9:600 8:300	9,200	11:000	
MARILLO, TEX	9,600	8,900 12,300 10,900	12,800	12,500	12,000 16,500 16,500	17,000	7,500 8,400 11,500	9,000 9,700	9,800 12,400 10,100	
SHEVILLE, N.C	9,600 10,100	9,000	10,000	9,000	11,700	14,000	8,800	9,400	8,600	
TLANTIC CITY, N.J	12,100	10,900		11,000	14,400	15,000		10,000	10,000	
USTIN, TFX	10,500	8,800 10,000 11,000	8,500  10,800	9,300 9,200 11,000	11,000 13,000 15,000	13,700	10,000	10,000	8,400 10,500 9,900	
ATON ROUGE, LA	11,000	10,600	10,000	11,200	15,000	14,700	9,500	10,000	10,100	
EAUMONT-PORT ARTHUR, TEX	10,500	10,200		10,800	13,800	15,500	7,600	10,000	10,000	
INGHAMTON, N.YPA	11,800	12,000	11,400	11,500	14,500	16,000	8,400 9,600	9,900		
OSTON, MASS	11,500	11,000 9,400	10,500	12,000	1 16,000	16,700 13,000	9,200 7,500	10,000	11.000	12,100
ROCKTON, MASS	9,800 9,300 10,800	10,800	11,000	11,500	14,900	15,000	9,000	9,000	10,400	10,000
ANTON, OHIO	9,700	9,700					8,900			
HAMPAIGN-URBANA, ILL	11,000	10,200	10,000	12,000	15,800	17,300	8,400	9,100	9,400	11,00
HARLOTTE, N.C	11,000	11,000	11,800		13,500		7,800	10,000		
HICAGO. 1LL	11,200	10,900 10,300	11,800 11,400	10,500	15,000 14,000	15,000	9,200 8,600	9,700 9,200	10,800	11,20
LEVELANO, OHIO	11,000	10,700	11,400	10,500	15,000	15,000	9,000 8,300 9,500	10,000	10,500	11,00
COLUMBUS, GAALA	10,600	10,800	10,800	10,800	14,400	15,000	10,100	9,300	9,300	11,90
ORPUS CHRISTI, TEX	10,000	10,500	13,300	11,000 11,300	13,400	16,600	9,300	9,000	10,000	12,00
DAVENPORT-ROCK ISLANO-HOLINE, IOWA-ILL DAYTON, OHIO	7,200	10,800	11,800	10,600	14,000	13,800	9,000	9,000	11,000	
DENVER. COLO	11,000	11,000	11,600	10,300	13,600	14,100	9,200 8,400	9,000	11,000	11, 0
DETROIT, MICH	7,900 8,400	10,800	11,400	10,800	14,400	15,600	8,700	10,000	10,200	11,30
OURHAM+ N.C	12,000	11,400	10,500	12,400	15,700	15,800	10,700 7,800			
ERIE, PA	9,300	10,600	9,500		9,000		7,000 10,000		10,000	
EVANSVILLE, INOKY	9,000	9,600	10,000	10,400	14,000		8,400		10,000	
TITCHBURG-LEOMINSTER, MASS	10,000						9,000			
FORT LAUGEROALE-HOLLYWOOD, FLA	10,300						7 300			
ORT WAYNE, INO	9,800 10,800 9,300	10,700		10,900	15,000 14,500 10,300	15,000	7,200 8,400 9,000	8,700	12,000	
GAOSOEN, ALA	11,500	11,000	11,000	10,900	14,200	14,100	11,500	9,700		
GARY-HAMMONO-EAST CHICAGO, INO GRANO RAPIOS, MICH GREAT FALLS, MONT	9,000	13,200		13,100	16,300	17,300	7,500 7,300	11,700		
GREEN SAY, WIS	9,500 9,000 9,200	9,500			12,000		8,000			
GREENVILLE, S.C	8,000 9,600						9,200			
HARRISBURG, PA	9,300	9,500	12,100	10,900	10,500 15,000 13,000	15.600	7,600 7,800 9,300	10,000	8,000 10,500 10,000	
HONOLULU, HAWAII	10,300	10,300	10,000	10,500	16,000	15,500	9,900 7,500	10,000 8,700	11,200	10,60
HUNTSVILLE, ALA	- 11.700	10,600	11,800	11,700	14,000	14,000	8,600	10,300 9,500	11,000	
3ACKSON_ MISS	→ 10.100	10,300			12,000		8,700		10,000	
JACKSONVILLE, FLA	9,800		9,800	10,800	11,600	1	8,600	10,000	10,000	



		WORK ACTIVITY								
LOCATION	TOTAL	RESEAR	CH ANO DEV	EL OPHEN T	MANAGEM AOMINIS	ENT OR TRATION	TEACHING	PRODUCTION AND	OTHER	NO REPORT OF WORD ACTIVITY
		TOTAŁ (A)	BASIC RESEARCH	APPLIEO RESEARCH	TOTAL (B)	OF R+O		INSPECTION		
STANDARO METROPOLITAN STATISTICAL										
AREAS - CONTINUEO ALAMAZOO, MICH	12,000	12,100	12,200	12,500	15,900	16,200	8 • 800			
ANSAS CITY, MOKANS	10,300	10,000	10,500	10,000	14,400	15,000	7,500	9,500	10,800	
NOXVILLE, TENN	12,000	12,000	12,400	11,300	15,000	15,200	9,000 7,800	10,400 10,000	10,700	
AKE CHARLES, LA	9,600	10,600		10,800	12,000 15,500	15,500	8,500	9,000 8,100		
ANSING. HICH	11,000	10,800	11.000	10,800	15,000	15.000	10,700		10,100	
AREOD, TEX	10,000	9,900		10,000	11,700					
AWRENCE-HAVERHILL, MASSN.H AWTON, OKLA	10,100						8.500			
EWISTON-AUBURN, MAINE Exington, ky	10,800	10,700	10,800	10,400	14,300		10,500		10,000	
IMA, OHIO	8,500 9,700	10,000	9,600	10,000	12,400	12,900	9,200			
ITTLE ROCK-NORTH LITTLE ROCK, ARK Draine-Elyria, Ohio	10,500	10,300			11,400		10,500		9,900	
OS ANGELES-LONG BEACH, CALIF	12,500	12,300	12,000	13,000	16,500	17.500	9,700	10,400	12,000	13,000
DUISVILLE, KYIND	10,500	10,800 9,900	11.300	10,000	14,000		8,500 7,500	9,800	9,200	
UBBOCK, TEX	9,300						9,100 8,200		9,600	
ACON, GA	8,600 10,500	10,000	10,000	10,300	12,900	14,800	11,200	8,600	10,000	13,000
ANCHESTER, N.H	9,600									
EMPHIS, TENNARK	10,100	11.000	11.200	11,000	13,200	16,000	8,200	9,000	10.000	
ERIOEN, CONN	10,000	10,000	9,800	10,000	13,600	14,000	8,400		11,000	
IOLANO, TEX	10,600	9,300	10,500	9,000	15.000 14.000	15,000	8,500	10,000 9,000	10,000	
INNEAPOLIS-ST.PAUL, MINN	11,000	10,500	10,800	10,600	14,200	15,000	10,400	9,700	10,400	13,50
DNROE, LA	8,400 8,700						7,900			
JNCIE, IND	3,800						8,400			
USKEGON-MUSKEGON HEIGHTS, MICH ASHVILLE, TENN	10,700	10,000	10,000	9,500	12,000	12,300	9,600		9,000	
EW BEOFORD, MASS	9,000									
EW HAVEN, CONN	10,300	10,000	9.500 11.000	11,000	15,600 14,500		10,000	10,300	9,200	
EW ORLEANS, LA	10.300	9,800 11,400	10,000	9,500 11,500	13,600 16,500	13,300	8,800 9,500	9,600 11,000	10,500	12.00
EWARK, N.J	12,100	12,000	13,000	12,000	16,000	16,600	8,500	10,000	10,500	11,70
ORFOLK-PORTSMOUTH. VA	9,000	10,000					7,300			
ORWALK, CONN	12.200	12,000		12,000	16,500	18,000				
GOEN, UTÁH — — — — — — — — — — — — . KŁAHOMA CITY, OKŁA — — — — — — — — — —	9,600	11,000	11,000	10,500	12,100	12,500	9,200	10,000	10,000	
MAHA, NEBRICWA	10,500	11,500 10,000		10,900	14,500	15,000	9,000 6,500	7,900	10,900	
ATERSON-CLIFTON-PASSAIC, N.J ENSACOLA, FLA	11,300	10,500	12,000	10,200	15,700	15,900	8,100	10,000	10.100	10,50
HILAOELPHIA, PAN.J	10,300	10,600	10,100	10,600	14,500	14,700	8.300			
HOENIX, ARIZ	11.300	11,000	11.000	9,300	15,500		9,000	9,900 8,400	11,000	12.00
ITTSBURGH: PA	11,300	11,100	11.700	11,000	15.300	16.000	9,400	10.200	11,000	14,00
ONCE: P.R	8,000									
ORTLANO, OREGWASH	10.000 9.600	10,000	10,500 9,000	10,000 8,800	11,800	12,500	8,400 8,500	8,500 10,100	10,500 9,500	
ROVO-OREM. UTAH	8,800				11.000		8,500			
ACINE. WIS	10,000	9,500			13,400					
ALEIGH, N.C EADING, PA	9.000	8,800	10,000	10,000	12,600		9,600 7.600		9,300	
ENO, NEV	પ્ર.800 10,600	9,600	10,300	11.100	14,200	15,000	8,800 9,500	9,000	10,000	
DANOKE, VA	9,400	12,000	12,000	12,000	16,700	17,100	9,500	10,500	10,600	10,00
OCKFORO, ILL	9.300 11,000	10,600	10,600	11,000	14,000	15,000	10,000	9,800	10,000	12,00
AGINAW, MICH										
T.LOUIS, MOILL	11.200	11,100	11,700	11,100	14,800	15,000	9.100	9,400	10,700	11,00
ALT LAKE CITY, UTAH An Angelo, Tex	10,100	10,100	10,300	10,000	12.500	13,200	9,500	9,000	10,000	
AN ANTONIO: TEX	10,000	10,000	10,000	11,000 10,600	14,000	15,000	7:100 9:200	10,000	10,600	
AN OIEGO, CALIF	10,900	10,800	10,300	11,200 12,000	15,000 15,600	16,000	9,000 10,200	10,200	10,300	11,80
AN JOSE, CALIF	12,600	12,300	12,000	13,000	16,100	17,100	10,600	10,500	11,500	12,10
ANTA BARBARA, CALIF	9,300	8,500 13,000	10,600	14,300	11,200	20, 500	7,000 9,100		10,000	
AVANNAH, GA	9,400 8,300				10,400		7,400			
EATTLE-EVERETT. WASH	11.000	10,800	10,400	11,000	14,000	15,000	9,600	9,000	10,800	11,50

TABLE A-32 --- MEDIAN ANNUAL SALARIES OF FULL-TIME EMPLOYED CIVILIAN SCIENTISTS. BY STANOARD METROPOLITAN STATISTICAL AREA AND WORK ACTIVITY, 1964--- CONTINUED

					WORK	ACTIVITY				
LOCATION	TOTAL	RESEAR	CH AND DEV	ELOPMENT	MANAGEM ADMINIS	ENT OR	75.46.17.116	PRODUCTION		NO REPURT OF WORK
		TDTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D	TEACHLING	AND INSPECTION	OTHER	ACTIVITY
STANDARD METROPOLITAN STATISTICAL AREAS - CONTINUED										
SHREVEPURT. LA	10,000				13,000			9,000	10,000	
SIOUX CITY, IOWA-NEB										
SIOUX FALLS, S.DAK	7,900							·		
SOUTH 96ND, IND	9,700	9,500	10,100		14,000		9,000			
SPOKANE, WASH	8,600				11,000		7,200			l
SPRINGFIELD, ILL	9.300				11,300	i i				
SPRINGFIELD, MO	8,800						8,000			
SPRINGFIELD, 0HIO	9,300									
SPRINGFIELD-CHICOPFE-HOLYCKE, MASSCONN	i0, →00	10,800		10,800	15,000	15,500	8,300	9,500		
STAMFORD, CONN	12,700	11,700	12,000	11,400	16,000	16,500		9,000	11,000	
STEUBENVILLE-MEIRTON, OHIC-M.VA										
STOCKTON, CALIF	9,000						7,800			
SYRACUSE, N.Y	11,200	11,400	11:000	11,600	15,000	15,500	10,000	10,000	10,800	
TACOMA, WASH	9,000	9,300			10,700		7,500		9,600	
TAMPA-ST.PETERSBURG, FLA	9,500	9,900			12,000	14,500	8,200		9,900	
TFRRE HAUTE, IND	9,500	9,600			13,000		9,000			l
TEXARKANA, TEXARK										
TOLEOG, OHIO-MICH	10,200	10,200	11,500	10,200	13,000	14,000	9,000	9,300		
TOPEKA, KANS	9,700				12,500		7,000		10,900	
TRENTON, N.J	12,000	11,800	11,700	12,000	15,000	16,000	9,000	10,500	10,000	
TUCSON, ARIZ	10:000	10,000	9,600	10,200	13,800	14,000	9,000		9,800	i
TULSA, OKLA	11.700	11,500	12,000	11,400	15,000	16.000	8,500	10,000	10,600	
PUSCALOOSA, ALA	9,600						9,400			
TYLER, TEX	10,000			_~					10,000	
UTICA-40ME, W.Y	9,500	10,500			11,700		7,500			
VALLEJO-NAPΛ, CALIF	9,900									
WACO, TEX	9,300						8,100			
₩ASHINGTON, 9.CMOVA	12.600	11,700	11,700	12,000	15,700	16,000	9,000	11.700	11,700	12,900
WATERBURY, CONN	10,600	9,400	!	9,900	13,000	12,000		9,900		
WATERLOO, IOWA	9,200						8,800			
WEST PALM BEACH, FLA	10,600									
₩HEELING, ₩.VADHIO	9,000									
wichita, kans	10,000	10,000			13,900		8,200	8,600	10,000	i
WICHITA FALLS, TEX										
WILKES-BARRE-HAZLETON, PA	7,800						7,100			
#ILMINGTON, OELN.JMD	13,500	12,600	12,800	12,900	18,400	18,500	9,300	12,000	13,200	14,400
WINSTON-SALEM, N.C	10 - 400	10,800	11,500		17,400		8,700			
HORCESTER, MASS	10:000	10,000	10,300		15:000	15,000	8,500			
YORK, P4	9,200						7,990			
YOUNGSTOWN-WARREN, OHID	8,730						7,500			
OTHER LOCATIONS	10,000	10,200	10,100	10,300	12,300	14,200	8,400	9•300	10,000	10,300

<sup>(</sup>A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH OR DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

NOTE—TEACHING SALARIES REFLECT A COMPOSITE OF ACADEMIC AND CALENDAR YEAR SALARIES FOR SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION. NO MEDIAN WAS COMPUTED FOR ANY GROUP WITH FEWER THAN 25 REGISTRANTS REPORTING SALARY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

		SCIENTIFIC AND TECHNICAL FIELD									
L ANGUAGE	TOTAL	CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES				
NDO-EUR OPFAN			_				<del></del>				
INDIC  HINDU-URDU	638 76 39 3 26 2 30 40	140 15 19 1 1 8	47 7 2  1 2	1 	105 11 2  3 3	44 6 3  2  5	30 2  1 1 2				
IRANIAN PERSIAN	177 5 6	33  1 5	23 1 5		11  1	13  1	7				
### ##################################	492 8,167 1,753 802 245 48 259 115	217 1,904 567 272 48 15 107	19 792 48 51 13 1	5 242 27 20 5  3 2	58 1,982 205 88 37 5 28	25 906 129 49 21 3 12	19 115 40 23 3 				
ROMANCE FRENCH	107,400 36,996 4,957 1,115 101 329	31,352 5,853 1,414 133 29	6,023 6,741 261 241 7	1,578 1,088 121 41 2	14,568 2,590 597 86 12	8,943 2,473 414 60 4 226	2,600 1,861 81 48 2				
GERMANIC  SHEDISH	124,343 1,220 1,173 774 528 531	44,315 263 332 129 96 63	6+910 98 87 83 43	2,107 33 16 29 12	18,366 140 212 89 93 43	9,400 89 77 58 44 39	2,951 79 36 45 18				
MISCELLAMEOUS INDO-EUROPEAN  CFLTIC	40 I,160 199 20 177	4 350 68 6 1	1 56 5 1	3 29 3 	6 133 37 	101 11 	1 6  1				
FRO-ASIATIC  SEMITIC  ARABIC	768 1,468 16	139 283 2 1	161 29 1	7 14 	71 259 2	39 214 	25 13 2				
OTHER AFRD-ASIATIC  BERBER	3 2 7		 1 1								
FRICAY NIGER-CONGO SWAHIL!	59 17 8 5 8	1 1  1	22 2 3 	2	5 2 1 	1	3				
OTHER SUB-SAHARAN AFRICAN	8	1									

	SCIENTIFIC AND TECHNICAL FIELD							
LANGUAGE	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SCCIOLOGY	LINGUISTICS	OTHER FIELOS	
INOO-EUROPEAN INOIC								
HINDU-UROU	91 12 1 1 4	25 4 	29 3 3 1	42 2 2 	20 3 1 	30 6 1 1 3	29 7 4	
ORIYA	1 4 3	 4 1		5 1	 2 2	 2 13	1 2	
IRANIAN PERSIAN	18 1 3 1	11  1	2	14 1 	3	26 2 1 2	16 	
BALTO-SLAVIC  BALTIC (LITHUANIAN AND LETTISH)	43 523 172 82 26 6 20 8	27 314 109 45 11 4 12 7	5 106 24 12 3 	21 343 97 47 31 5 14	5 86 25 18 11 1 4	13 139 27 24 18 7 11	35 715 183 71 18 1 25	
ROMA NCE FRENCH	16,253 4,587 617 132 11 2	9,380 3,979 495 55 7	1,271 543 66 18	5,913 2,971 321 119 8 6	1,768 669 84 29	522 385 68 52 10	7,229 3,256 418 101 8 47	
GERMANIC  GERMAN	17,002 177 138 100 89 55	6,987 76 53 47 31 173	1,214 19 9 14 5	4,523 103 88 76 33 23	1,240 ; 32 20 ; 27 ; 16 ;	403 / 28   24   18   13   28	8,924 83 81 59 35	
MISCELLANEOUS INDO-EUROPEAN  CELTIC	5 145 16 1	3 124 19 1	24	2 65 12	14 1 1	7 196	4 94 24 3 20	
AFRO-ASIATIC	97 118 4 2	29 241 2	6 32 	65 83 	16 38 1	38 27 1	75 117 1	
OTHER AFRO-ASIATIC  BERBER	1					2 1 3	1 2	
NFRICAN NIGER-CONGO SWAHILI	1 2 			5  1 1	1	10 	7 	
OTHER SUB-SAHARAN AFRICAN	1	1				2	3	

			s	CIENTIFIC AND	TECHNICAL	FIELD	
LANGUAGE	TOTAL	CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
URALIC - ALTAIC  OSMA:NLI TURKISH (ISTANBUL AND ANATOLIAN)	293 23 10 4 976 354 115	37 5  377 82 45	64 1  37 36 4	8  15 12 1	46 1  121 36 24	•	9  19 42 1
FAST ASIAN SINO-TIBETAN MANDARIN CHINESE	510 1,384 79 32 5 34 14 28	19 598 5 4  1	8 74 5 3  1 2	21 6 5 1 	25 310 7 2	165 13 3  1 3	2 27 3 1 1
OTHER EAST ASIAN  JAPANESE  KOREAM:	2,407 290	567 79	131 19	168 14	307 54	210 21	76 11
INDONESIAN  MALAY AND BAHASA INDONESIA	227 5 	21 2  14 2 1  6	60  6 1 1	6 	20  3  4	9  5  2	13
OTHER MALAYO-POLYNESIAN POLYNFSIAN	41 7 7	 	4 1 2		2		
TAULU	57 42 22 25 5	9 3 3 10	3 1 	2 2 1 	17 8 5 5	5 4 1 2 1	 
NORTH AMERICAN NORTH AMERICAN IADIAN, OTHER	13		5 7	 1	1	2	2 3
CENTRAL AMERICAN - TOTAL, INCLUDING UTU-AZTECAN	48	1	2		1		1
SOUTH AMERICAN INDIAN, OTHER	5 6 36	1 2	1		2		1
GEURGIAN	1 5	1 1	1				
PAPUAN-AUSTRALIAN	9 24 1,296	1 356	27	22	18		2

		-	SCIENTIFIC	AND TECHNIC	AL FIELD		
LANGUAGE	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELDS
URALIC-ALTAIC  OSMANLI TURKISH (ISTANBUL AND ANATOLIAN) OTHER TURKIC	18  124 33 10	19  1 66 19 2	  9 2	25 3  1 61 24 2	6  10 8 1	17 9 10 1 17 8 7	27 4  68 28 5
EAST ASIAN SIND-TIBETAN MANDARIN CHINESE	17 194 9 4  4 2	15 25 2 1 	33 3 1 1 2 1	98 6 8 3 1 2	22 18 3  3 2	41 7 22 11 5 11 3	44 103 6 1 
OTHER EAST ASIAN  JAPANESE	347 25	115 7	41 8	150 26	43 6	53 3	199 17
MALAYO-POLYNESIAN INDONESIAN MALAY AND BAHASA INDONESIA	24  8  8	4 1  3 3  5	3    2	25  5  2	1 2	17 2 	7 1 1
OTHER MALAYO-POLYNESIAN POLYNESIAN	6 	5 		2 1	3	9 2 2	8 3 2
DRAVIDIAN         TAMIL       — — — — — — — — — — — — — — — — — — —	5 5 4 1 3	2 	3 4	1 3 2	1 1 	6 5 1 1	4 1 3 1
AMERICAN INDIAN NORTH AMERICAN NAVAHO	2	1			<u>1</u>	4 37	2 7
CENTRAL AMERICAN - TOTAL, INCLUDING UTO-AZTECAN		1			1	38	3
SOUTH AMERICAN GUARANI	1					4 5 25	5
CAUCASIAN GEORGIAN				1		2	
MISCELLANEOUS PAPUAN-AUSTRALIAN	1 284	 1 195	  5	 1 54	30	7 14 65	2 4 165

NOTE - THESE DATA ARE BASED ON A MAXIMUM OF THO FOREIGN LANGUAGES REPORTED 8Y 180,925 OF THE 223,854 TOTAL REGISTRANTS.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.



					PROFI	CIENCY					
LANGUAGE	TOTAL	CAN PRE DELIVER	PARE AND LECTURES	CAN CO	NVERSE	IKANSE	CILITY TO ATE TECH- JOURNALS	ARTI	O TECHNICAL CLES FOR N USE	USE AS A	REPORT
		FLUENTLY	SUPER- FICIALLY	FLUENTLY	PASSABLY	Turo			WITH OIFFICULTY	MEDIUM OF COMMUNI- CATION	PROFIC- IENCY
INOO-EUROPEAN INOIC HINOI-UROU	605 71 38 2 23 2 28 27	334 55 35  17 2 21 10	77 8 2 3 1 7	375 52 36 2 16 2 24 12	125 7  4 	324 50 26 2 16 2 15	237 41 20 1 11	307 43 27 1 16 2		67	1
IRANIAN PERSIAN	150 3 5 16	77 3 2 8	14	68 3 3	49	72 3 1 8	53 3 1	66	11 1	18	1
BALTO-SLAVIC BALTIC (LITHUANIAN AND LETTISH)	479 8,020 1,725 776 226 41 247 110	288 559 562 235 115 19 136 33	54 779 337 110 24 4 23	329 685 789 342 122 24 166 50	99 1,494 678 298 64 11 52	293 3,243 886 340 125 23 146	235 800 492 183 88 16	283 2•028 807 296 114 22 131	24 3,428 315 132 32 4	18 2,541 204 113 19 2	3 1
ROMANCE FRENCH	106.860 36.596 4.890 1.062 92 319	3,050 2,516 755 234 51	9,533 4,649 950 267 11	3,734 3,161 1,120 303 54 16	21,829 12,122 2,220 466 24 32	38,671 11,202 2,376 599 60 82	6,999 3,733 855 228 39	43.161 10.870 2.266 638 57	39,523 10,547 1,184 185 16	25,424 13,837 925 159	60 15 1
GERMANIC  GERMAN	123,944 1,193 1,147 756 514 501	5,780 188 494 170 158	9,865 191 145 124 94	7,178 280 541 230 198 236	24,437 533 348 333 207 204	42 • 268 507 754 352 311	163 444 155 142	36.034 502 742 353 302	57,378 280 156 143 75	32+121 224 106 135	54 2 1
MISCELLANEOUS INDO-EUROPEAN CELTIC	31 1,141 199 14	15 424 52 4 17	3 200 37 2 21	18 612 107 8	6 252 80 3 37	16 535 58 4 56	116 12 352 41 3 23	177 15 469 41 3	1 189 25 1 31	195  - 9  - 3  -	1
AFRO-ASIATIC SEMITIC ARABIC	725 1,439 15 6	328 470 2 2	48 300 2	344 555 1	169 495 9	310 746 2	252 405	286 620 1	33 287 2	175 289 5	1 2
OTHER AFRO-ASIATIC BERBER	1 - 3 -		1 -		1				1	1	
NIGER-CONGO SMAHILI	45 7 6 3 2	3 2 - 3	5 1 	5 4 2 3	3	2 1 2 1	2 3 1 2	5 2 3 1	1	9	
NIGER-CONGO, OTHER OTHER SUB-SAHARAN AFRICAN	6	3	1	2 -	1	1 3	1 2	1 -		1 -	

ERIC\*

					PROFI	CIENCY				5045	
L ANGUAGE	TOTAL	CAN PRE DELIVER	PARE AND LECTURES	CAN CO	NVERSE	TRANSL	CILITY TO ATE TECH- JOURNALS	ARTI	D TECHNICAL CLES FOR N USE	SOME KNOWLEDGE BUT CAN'T USE AS A HEDIUM OF	
		FLUENTLY	SUPER- FICIALLY	FLUENTLY	PASSABLY	INTO ENGLISH	FROM ENGLISH	EASILY	HITH DIFFICULTY	COMMUNI- CATION	IENCY
URALIC- ALTAIC DSMANLI TURKISH, (ISTANBUL											
AND ANATOLIAN) OTHER TURKIC MONGOLIAN	276 14	6	1	99 6 	86	91 7	69 4	87 6	43 2	77	
ALTAIC, OTHER	959	628	98	674	1 152	1 652	1 502	1 588	2 87	51	
FINNISHESTONIAN AND OTHER BALTO-FINNIC URALIC, OTHER	345 108 7	89 92 1	75 6	158 95 1	139	166 91	74 85 1	150 83	77 2	39 1 3	1
EAST ASIAN SIND-TIBETAN											
MANDARIN CHINESE	467 1,377 55 20	308 946 14 11	37 127 6	286 941 13 14	79 151 20 2	280 796 14 10	212 628 10	265 786 12	30 69 4	44 76 18	1
TIBETAN	23	10		9			8	9	<u></u>		
CAMBODIAN (KHMER) OTHER SOUTHEAST ASIAN	10	4 3	1	3	8 4 2	9 3 1	3	6 3 1	5 	3 1 3	
OTHER EAST ASIAN JAPANESE	2,352 286	772 199	273 11	809 166	760 28	869 162	617 129	7 <b>7</b> 6 147	26 <b>4</b> 9	623 53	1
MALAYO-POLYNESIAN Indonesian											
MALAY AND BAHASA INDONESIA - Javanese Sudanese	208 3	28 2	43 1	41 3	116	59 2	21	45 2	50 1	45	1
MADURESE	57	15	5	24	19	17	12	16	5	 iš	
VISAYAN	9 5	3	2	6 2	2	4		4		1	<u>2</u>
MALAGASY	1 35	19	7	25	9	1 21	15	18	1 3	i	4
OTHER MALAYO-POLYNESIAN POLYNESIAN	29 4 3	7 2 1	4 1 1	11 2	10 2 2	5 1	3 1	6	3 2	8	
ORAVIDIAN			<del>-</del>								
TAMIL	51 37	34 33	3	33 23	10 3	29 22	23 15	27 17		3	
MALAYALAM	21 23 5	18 i7 3	2 3 1	15 17 3	1 3 2	15 14 3	12 12 3	14 14 4	1	1 2	
AMERICAN INDIAN NORTH AMERICAN											
NAVAHO	9 19	1	1 1	1	5 8	. 1	1	2		3 10	
CENTRAL AMERICAN - TOTAL, INCLUDING UTD-AZTECAN	6		1	1	2					3	
SOUTH AMERICAN GUARANI	1			_							
QUECHAU SOUTH AMERICAN INDIAN, OTHER	1 6	1 2	1	3	<u>1</u>	<u>1</u> 3	2	3	1	1	
CAUCASIAN GEORGIAN CAUCASIAN, OTHER	1 3	1	1	1 1		1	1	1		2	
TISCELLANEOUS PAPUAN-AUSTRALIAN	1				1						
CREDLES AND PIDGINS OTHER LANGUAGES NOT INCLUDED IN ANY OF THE ABOVE CATEGORIES -	1,230	95	95	3 84	184	295	172	255	150	727	
				"]	• • • • • • • • • • • • • • • • • • • •	277	112	222	158	727	5

NOTE - THESE DATA ARE 8ASED ON A MAXIMUM OF TWO FOREIGN LANGUAGES REPORTED BY 179,543 OF THE 223,854 TOTAL REGISTRANTS.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.



AREA	TOTAL		s	CIENTIFIC AND	TECHNICAL	FIELD	
		CHEMISTRY	EARTH SCIENCES	METEOROLOGY	PHYSICS	MATHEMATICS	AGRICULTURAL SCIENCES
ALL AREAS	223,854	63.053	17,907	5,510	26,698	17,411	9,526
ALL FOREIGN AREAS	47,495	9,938	4,861	2,248	4,721	3+285	1,536
AFRICA, GENERAL	<b></b>						
NDRTH AMERICA (EXCEPT U.S.), GENERAL	70 3.750 1.48 1.662 1.874 245 647 397 394 314 571 282 298 399 43 33 569 137	9 829 6 174 272 41 87 81 88 76 92 36 36 38	23 682 35 240 338 26 69 77 102 40 97 65 101 107	7 101 48 89 23 15 39 9 15 2 19 5 3 16	2 295 14 40 70 12 36 22 18 18 46 21 4 15	1 305 9 56 76 15 27 20 12 15 26 7 14 10	3 178 3 98 95 6 30 22 15 10 28 15 13 23
MIDMAY ISLAND	33 1 420 47 6	51 2 	32 3 3	14  97 22 1	26 3	30 3	24
INTERNATIONAL WATERS	278	53.115	13-046	68	21.977	14.126	7,990
TO REPORT OF FOREIGN AREA	1101334	53,115	13,046	3,262	21,977	14,126	7,990

AREA			SCIENTIFIC	AND TECHNIC	AL FIELD		
ARCA	BIOLOGICAL SCIENCES	PSYCHOLOGY	STATISTICS	ECONOMICS	SOCIOLOGY	LINGUISTICS	OTHER FIELOS
ALL AREAS	27,135	16,804	2,843	12,143	2,703	1,351	20,770
ALL FOREIGN AREAS	7,332	3,084	607	3,990	1,126	934	3,833
AFRICA, GENERAL	41 72 46	12 15 12	3 5 5	38 26 22	16 6 6	2 15 9	12 23 37
AFRICA, EAST CENTRAL	41 52 8	9 19 2	1 3 1	25 37 3	13 13 12	2 7 2	14 35 3
AFRICA, EAST SOUTH CENTRAL	21 42 10	3 13 6 48	4 1 22	11 16 83	6 11 2 33	26	23 4 79
SOUTHEAST ASIA	154 108 236 396	40 96 166	6 53 42	89 175 239	22 76 59	35 46 36	56 117 242
KOREA	116 35 124	52 5 52	14 4 18	58 17 42	16	1 7 12	58 25 87
NORTHERN ASIA	3 2 1 7			1	3	4	17
IRAN (PERSIA)	23 15 37	21 6 7	3	24 11 21	5 6 9	11 4 6	21 14 15
ISRAEL (PALESTINE)	60 22 2	57 24 1	12 6 	46 35 	18 7 	11 15	37 22 49
AUSTRALIA	137 50 34 28	36 16 9 6	1 4	9 3 23	8 3 1	2 12 11	9 21 19
PORTUGUESE TIMOR AND AMBENO	1 411	254	36	459	69	24	1 2 286
SCANDINAVIAN PENINSULA — — — — — — — — — — — — GREAT BRITAIN — — — — — — — — — — — — — — — — — — —	294 962 122	91 374 45	18 72 8	96 360 62 279	53 87 21 88	25 25 13 87	82 337 70 387
GERMANY — — — — — — — — — — — — — — FRANCE, CURSICA, MONACO — — — — — — — — — — — — — — — — — — —	490 297 212 46	328 179 132 17	21	161 79 26	50 11 2	66 18 34	187 70 20
ADRIATIC ISLANDS	71 173 5	27 111 2	11 12	68 96 17	15 27 3	25 33	100
RUSSIA	45 12 28	30 8 24	7 4 4 3	109 4 20 21	26 5 7 7	47 10 12 11	47 4 18 8
CZECHOSLAVAKIA	30 6 2 51	10 2 1 17		4 1 21	1	2 6	3 1 20
ALBANIA	14 491	1 259	40	1 217	35	2 6	9 312
GREENLAND	424	78 131	13 15 1	268 118 17	53 66 13	32 73 3	15 115 173 20
HEST INDIES FEDERATION	63 143 60 74	13 56 24 18	15	47 26 41	25	16	57 38 44
ARGENTINA AND PARAGUAY	51 71 35	11 31 13	10 4	42 61 38	13	18 6	33 59 28
COLUMBIA + + +	78	6 9	3	27 28	8 11	15 18	21 45 2
GUIANA)	6 22	13	2 2 2	6 1 24	3	7	3 62 5
ANTARCTICA, FALKLAND ISLANDS	<b>⊣</b> 1	1 18	9	12	7	5	35
ATLANTIC ISLANDS NOT ELSEWHERE CLASSIFIED INDIAN OCEAN ISLANDS NOT ELSEWHERE CLASSIFIED	9 2	2		2		44444	
INTERNATIONAL WATERS	19.803	13,720	2,236	8,153	1,577	417	16,937

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

			HIGHEST	OEGREE			
SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	PH.D.	PROFESSIONAL MEOICAL	MASTER'S	BACHELOR*S	LESS THAN BACHELOR'S DEGREE	NO REPORT OF OEGREE
ALL SUBFIELDS	223,854	79,372	5+ 925	61,222	72,364	2+878	2+093
ANALYTICAL CHEMISTRY	8,878 5,192 24,162 6,578 3,228 6,340 7,940 735	1,678 1,588 8,445 857 892 3,940 4,199	6 2 12 2 2 341 3	2,003 1,066 4,543 1,522 653 827 1,415 200	4,923 2,398 10,617 4,095 1,589 1,189 2,242 324	131 59 252 46 40 16 39 7	137 79 293 56 52 27 45
GEOCHMISTRY	407 130 10,969 906 1,970 1,451 795 615	214 12 1,833 340 249 571 106 197	   1	105 40 3,828 328 387 579 202 203	86 68 5•174 219 1•202 281 460 206	7 74 14 95 10 24	2 3 60 5 37 10 3
ATHOSPHERIC DYNAMICS, CHEMISTRY AND PHYSICS	664 777	56 287		157.	405	26	20
CLIMATOLOGY	244 3,080 1,230 178 1	50 69 59 14		260 76 546 200 55	212 89 1,491 660 72	13 20 827 256 30 1	5 9 147 55 7
ACOUSTICS	1,381 1,772 1,666 1,349 943 3,170 2,371 1,781 4,151 635 3,682 889 1,721 1,187	338 956 562 760 233 1.512 591 870 1,953 221 1.219 423 363 285	1 2 1 2 2 2 1	424 435 532 319 356 959 683 510 1.199 200 1.558 232 514 431	570 373 545 266 349 687 969 389 963 206 891 224 786 455	29 	19 8 10 3 4 7 41 7 19 5 10 5 21
ALGEBRA	1 • 633 2 • 785 798 381 4 • 237 330 5 • 729 637 433 448	551 1,344 281 174 773 170 611 372 214	2	920 1,263 435 168 1,669 128 2,216 237 165 263	149 161 76 32 1.679 29 2.654 23 47 67	3 4 2 3 60 1 130 1 4	10 13 4 4 54 2 116 4 3
AGRONOMY	1,168 680 1,407 4,008 872 1,391	593 286 164 220 453 651	9 1 1	354 252 562 907 271 330	205 126 661 2•828 142 400	11 4 10 30 3 5	5 3 9 23 3 4
ANATOMY	1.006 2.244 1.147 2.110 1.309 732 2.793 1.196 1.067 1.345 3.014 1.096 556 2.785 3.047 835 853	591 1,353 508 976 896 416 1,502 830 215 920 1,665 759 336 1,394 449 402 143	173 1 4 2 41 210 123 51 807 259 1.012 138 24 2,477 52 34	157 625 411 623 246 47 694 203 18 73 205 218 50 834 65 194	82 260 223 469 120 53 459 101 16 87 116 115 31 512 43 181 304	1 1 31 3 2 6 7 2 1 1 1 1 11 2	2 4 1 9 3 4 9 5 15 3  10 11 6

ERIC Part and Procedure Bills

TABLE A-36.-NUMBER OF SCIENTISTS, BY SUBFIELD AND HIGHERT DEGREE, 1964-CONTINUED

	į		HIGHEST	DEGREE			
SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELOR * S	LESS THAN BACHELOR®S OEGREE	NO REPOR
CLINICAL PSYCHOLOGY	6,151	3,934	27	2.022	154		
COUNSELING AND GUIDANCE	1,831	1,046	li	2+022 751	156 33		12
DEVELOPMENTAL PSYCHOLOGY	510	396	l i	107	6		
EDUCATIONAL PSYCHOLOGY	1,427	930	l i	475	21		
ENGINEERING PSYCHOLOGY	377	195		171	ii		
GENERAL PSYCHOLOGY	141	107		31	3		
INDUSTRIAL AND PERSONNEL PSYCHOLOGY PERSONALITY	1,367	733		531	98	2	3
SCHOOL PSYCHOLOGY	479	393		77	9		
EXPERIMENTAL, COMPARATIVE, AND PHYSIOLOGICAL PSYCHOLOGY	939	253		675	11		
PSYCHOMETRICS	1,912	1,548	20	302	40		2.
SOCIAL PSYCHOLOGY	467	337		121	8		1
"SYCHOLOGY, OTHER	1,004 199	841	1	144	15	2	1
	199	130	1	57	6		5
STATISTICS	2,843	804	3	1,133	810	43	50
GENERAL ECONOMIC THEORY	1,241	656		481	93	_	_
ECONOMIC HISTORY. HISTORY OF THOUGHT	5د 2	196		57	93	2	9
ECONUMIC SYSTEMS. DEVELOPMENT AND PLANNING	854	432		314	102	4	3
ECONOMIC STATISTICS	483	227		180	. 70		12 6
MONETARY AND FISCAL THEORY AND INSTITUTIONS	978	606		287	70	6	9
INTERNATIONAL ECONOMICS	532	291		182	50		9
MARKETING AND ACCOUNTING	4,742	1+123		1.653	1 • 830	64	72
BUSINESS, INDUSTRY STUDIES	804	377	1	252	159	9	
LAND ECONOMICS	1,254	657	ī	483	103	3	6 7
LABOR ECONOMICS	662	373		209	73	i	6
POPULATION, WELFARE PROGRAMS, STANDARDS OF LIVING ECONOMICS, OTHER	164	83		48	31		2
conduites, other	154	70		58	23	1	2
APPLIED SOCIOLOGY	63	45		,,		_	
GENERAL SOCIOLOGY	265	200		14	2	1	1
METHODOLOGY	268	208		58 40	5	1	1
POPULATION	173	112		40	16 19	1	3
RURAL-URBAN SOCIOLOGY	340	293		43	3		2
SOCIAL CHANGE AND DEVELOPMENT	178	40		33	3		1
SCCIAL ORGANIZATION.STRUCTURE. AND INSTITUTIONS	1,064	914	a !	131	9		2
SOCIAL PROBLEMS. SOCIAL DISORGANIZATION	314	240	i	66	6		1
SOCIOLOGY, OTHER	38	27		9	2		
APPLICATION TO LANGUAGE TEACHING	392	158	1	, , ,			
DESCRIPTIVE LINGUISTICS	407	222	i	172 108	47		14
GENERAL LINGUISTICS	81	47		108	62		14
HISTORICAL AND COMPARATIVE LINGUISTICS	210	154		28	14	1	
LANGUAGE IN RELATION TO OTHER FIELDS	158	103		43	10		17
ANGUAG. POLICIES	3	2			10		2
LITERACY AND WRITING SYSTEMS	16	3		6	7		~
MECHANIZED APPLICATIONS	27	10		12	4		1
PHONETICS	28	18		8 1	2		I
INGUISTICS, OTHER	29	12		11	4		2
OTHER SPECIALTIES	6,158	1.376	29	2.698	1.000		
ENGINEERING	14,612	1,893	5		1+980	40	35
•			, ,	4.167	8 • 191	177	179

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

	Γ												
SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL		<del></del> -				AGE						
	TOTAL	20-24	25-29	30-34	35-39	40-44	45-49	50-54	<b>\$</b> 5-59	60-64	65-69	70 AND	NO REPORT OF AGE
ALL SUBFIELOS	223,854	8,247	34,102	39, 896	40,1/8	35,831	24,726	16,921	11,308	6,966	3,428	1,992	289
ANALYTICAL CHEMISTRY	8,878 5,192	602 354	1,539 857	1,514 789	1,586	1.329	893	638	391	217	103	61	5
RELATED CHEMICAL SPECIALTIES AGRICULTURAL AND FOOD CHEMISTRY	24,162 6,578	1,434 445	3.764 1.345	3+686 984		3,746 1,086	527 3•071 754	435 2.101		216 735	110 373	70 22 <b>4</b>	3 12
BIOCHEMISTRY	3,228 5,340	62 303	295 993	385 1,143	469	487 1,047	507 687	452 401	235 271	150 190	55 91	41 66	2 4
CHEMISTRY, OTHER	7,940 735	595 46	1,478 84	1,576 80	1+380 91	1,163	760 95	382 432 77	261 232 47	150 173	92 86	38 60	4 5
GEOCHFMISTRY	407 130	25	119	103	61	45	24	17	6	47	33	3	
GEOLOGY	10,969	315	1.171	24 2.106	28 2,513	20 1,998	1,101	11 671	14 447	7 307	3,3	1	
SOLIO-EARTH GEOPHYSICS GEOGRAPHY	1.970	74	181 205	204 333	128 428	104 353	61 224	45 185	48	30	211	120	- <del></del>
HYOROLOGY	1,451	130	231   58	263 88	213 144	217	146	107	116	56 43	21 20	8	1
OCEANOGRAPHY	615	34	107	112	125	142	104	93 30	101 23	31 5	16	11	i
HYDROSPHERIC SPECIALTZES, OTHER	664	28	58	64	112	107	72	47	52	50	31	20	1
ATMOSPHERIC OYNAMICS, CHEMISTRY AND PHYSICS	777	29	179	166	133							20	3
CLIMATOLOGY	3,080	66	15 360	32 553	35	121 53	88 45	34 24	17   19	4	4	2 -	
AREA SPECIALIZATIONS	1,230	16	96	191	506 177	624 337	573 240	208 102	136 52	36 12	12	6 -	
METEUROLOGY. OTHER	1  -				40	31	 	16	4	i -			l
ACOUSTICS	1.381	30 134	240 559	261	237	212	146	107	63	61	16	8 -	
ELEMENTARY PARTICLES	1 1666	70	355	472 349	226 287	177 248	94 122	47 96	33 62	19	7	4 -	
MECHANICS	943	118	524 203	319 167	176 154	111	62 83	20	10	43	19	14	1
OPTICS	3,170 2,371	178	77i 498	769 426	569 426	485	217	92	52 47	27 32	13	5	1
PHYSICS OF FLUIDS SULID STATE PHYSICS	1,781	81 218	424	412	351	335 280	215	158 58	116	74 13	27	10 -	
THERMAL PHYSICS	635	37	185	989 149	808 95	534 77	212	109	73 20	57 19	13	2	1
ASTRONOMY	3 • 682 889	323	920 239	691 189	485 139	458 78	224 50	219	157	125	60	18	2
PHYSICS, OTHER	1.721	34 143	338 290	361 176	305 151	280 117	151	39 104 76	41 85 72	29 47	8	7 -	1
ALGEBRA	1.633	41	396	343	258	174	143	123	86	54 49	15	6	7
LOGIC	798	70 14	621 126	143	420 110	321 76	222 88	174	159	115	55	1	1
MATHEMATICS OF RESOURCE USE	381 4 • 237	53	78 687	98 921	70 952	58 691	37 405	12	13	47	39	10 -	
NUMERICAL METHODS AND COMPUTATIONS	330 5,729	106	74 1 • 338	73	50	43	22	280	20	79	23	5 3 -	1
PROBABILITY	637 433	29 11	222	159	1 • 313 98	702 57	281 39	129	43	20	6	3	4
MATHEMATICS, OTHER	448	5	98 63	61	90 78	56 74	26 38	17	10	20	2	2	
AGRONOMY	1.168	6 10	105	187	188	237	165	118	74	46	22	13	7
FISH AND WILDLIFE	1 - 407	24	79 235	102 273	99 275	121	106 171	51 109	49	38	20	3	7 2
HORTICULTURE	4,008 872	73	663	763 134	690 114	595 163	445 136	364	253	95	32	3 14	5 21
ANATOMY	1.391	12	128	241	208	263	218	84 148	78 92	33 46	21	14 8	5 6
BOTANY	1.006 2.244	8 36	81 331	115	184 346	162 291	120 224	117	96	71	33	17	2
ENTOMOLOGY	1,147	24 15	241 170	251 355	210	139	108	183 86	165	29	63	33	9 6
GENETICS	1 • 309 732	32	202	265	393 262	310 215	274 120	220 82	181 49	112	40 18	33 13	7 7
MICROBIOLOGY	2, 793	33	57 271	131   376	178 564	137 499	81 390	58 285	31 179	23	18	6	1
PATHOLOGY	1,196	2	96 26	188	213 216	211	153	139	76	47	33	19 24	9 7
PHYSIOLOGY	1,345 3,014	25	75 220	201	318	270	201	116	89 82	64 42	30 16	12	1
PHYTOPATHOLOGY	1 · 096 556	19	130	208	703 210	155	370   135	256 72	1 83 85	91	44	17 15	3
ZOOLOGY	2,785	77	27 480	547	162 523	110 340	59 270	52 182	35 173	13	4		2
BIOLOGY, OTHER	3+047 835	32	161 146	448 143	568 159	568 167	445 90	339	244	179	51 72	20 20	12 1
	853	17	86 )	122	1 38	118	123	79	37 82	13	28	7	1 9
											-	•	

							AGE				-		NO NO
SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70 AND OVER	REPORT
CLINICAL PSYCHOLOGY COUNSELING AND GUIDANCE	6,151		396	1,039	1,490	1,281	690	526	326	194	114	74	16
DEVELOPMENTAL PSYCHOLOGY	1,831 510		89 33	233 82	307 99	299	299	256	167	113	32	29	3
EDUCATIONAL PSYCHOLOGY	1,427	-	62	168	270	88 253	213	40 181	47 129	23 75	16 37	15 35	2 3
ENGINEERING PSYCHOLOGY GENERAL PSYCHOLOGY	377	1	32	77	97	100	47	16	2	5			
INOUSTRIAL AND PERSONNEL PSYCHOLOGY	141		72	11 182	17 289	23 329	21 191	8 151	16 83	18 43	8 13	13	1
PERSONALITY	479	2	42	103	121	87	55	26	15	15	8	5	
EXPERIMENTAL, COMPARATIVE, AND	939	1	46	163	231	179	108	88	69	26	20	7	1
PHYSIOLOGICAL PSYCHOLOGY	1,712	11	306	469	459	325	142	80	56	35	15	14	
PSYCHOMETRICS	467 1,004	1	45	84	101	95		43	17	12	2	4	1
PSYCHOLOGY, OTHER	199	3	83	20 <b>4</b> 23	234 24	200 40	123 32	69	40 17	21	16	9	2
STATISTICS								1	• • • • • • • • • • • • • • • • • • • •	"	9	23	4
	2,843	22	377	572	543	462	379	228	151	80	16	12	1
GENERAL ECONOMIC THEORY	1,241	22	127	220	208	207	149	126	68	52	31	27	4
ECONOMIC SYSTEMS, DEVELOPMENT	265	4	27	26	38	53	23	33	19	14	15	13	
ANO PLANNING	864	10	86	152	143	149	116	83	58	28	29	9	1
MONETARY AND FISCAL THEORY AND	493	9	81	101	79	76	49	41	24	9	7 !		i
INSTITUTIONS	978	13	109	144	2 40	162	122	74	76	53	52	30	•
INTERNATIONAL ECONOMICS	532	7	36	83	87	87	79	58	46	21	18	30 8	3 2
BUSINESS FINANCE AND ADMINISTRATION,   MARKETING AND ACCOUNTING	4,742	61	420	723	802	887	717		احمد				
INOUSTRIAL ORGANIZATIONS, GOVERNMENT			7.0		502	001	" " "	449	307	203	103	68	2
AND BUSINESS, INDUSTRY STUDIES LAND ECUNOMICS	804	5	60	117	117	136	118	88	69	46	27	21	
LABOR ECO IONICS	1,254	13	125	220 75	187	231 114	156 116	125 91	78 62	46	40	29	4
POPULATION, WELFARE PROGRAMS,								~	اء	77	18	13	2
STANDARDS OF LIVING	164 154		7	22	25 31	25 24	21 14	20	19	13	7	4	1
			'1		"	- "	1.4	22	9	8	6	10	1
SEMERAL SOCIOLOGY	63			. 3	11	18	7	12	5	2	2	3	
METHODOLOGY	265 268	ī	18	19	38 71	52 45	52 44	39 l 15	23 13	16	12	10	
POPULATIO1	173	1	4	23	27	23	27	27	16	14	3 7	4	
RURAL-URBAN SOCIOLOGY	340 178		11	41 22	66 30	61	45	45	24	20	12	15	
SOCIAL ORGANIZATION, STRUCTURE, AND	• • •	]	'1		30	36	25	21	15	8	6	7	1
SUCIAL PROBLEMS. SUCIAL DISURGANIZATION	1.064	4	37	154	210	220	171	114	60	55	21	18	
SCCIOLOGY, OTHER	314 38		11	39	54	58	39	33	32	16	19	13	
APPLICATION TO LANGUAGE TEACHING		_			1	ľ	7	1	3	6	3	2	1
DESCRIPTIVE INGUISTICS	392 407	5 12	31 64	69 82	87 84	77 58	51	31	26	13	2		
GENERAL LINGUISTICS	81	3	12	15	13	12	29	31 8	18	12	3	10	3
HISTORICAL AND COMPARATIVE LINGUISTICS	210	4	17	36	35	30	23	23	24	11	4	3	
LANGUAGE IN RELATION TO DIHER FIELDS LANGUAGE PULICIES	158 3	2	22	22	24	23	20	15	12	10	6		2
LITERACY AND ARITING SYSTEMS	16		2	2	6	2	1	2	i	.			
PHONETICS	27 28		7 2	5	7	7	1			-			
LINGUISTICS. OTHER	29		5	6 2	9	2	1	3	3	1 2			
OTHER SPECIALTIES	, , , ,								1	i		- }	
ENGINEERINS	6.158 14.612	214 784	925	2,241		856 2,465	632	539	422 652	234   454	119	67	15
				<u> </u>			-,,			i	''	127	12

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

					TYPE OF	EMPLOYER				,	T
SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEOERAL GOVERN- HENT	OTHER GOVERN- MENT	MILITARY	NONPROFIT ORGANIZA- TIONS	ANO	SELF- Employeo	OTHER	NOT Employeo	NO REPORT OF TYPE OF EMPLOYER
ALL SUBFIELOS	223,854	77,727	23,405	7,472	5,522	8,722	84,421	4,277	1,434	9,617	1,257
ANALYTICAL CHEMISTRY INORGANIC CHEMISTRY	8,878 5,192 24,162 6,578 3,228 6,340 7,940 735	1.692 1.471 3.739 478 414 3.095 2.482 245	875 282 904 288 372 672 574	233 153 122 52 97 170 45 16	115 59 176 68 13 121 88	183 81 340 67 48 709 232 19	5, 174 2, 724 17, 291 5, 299 2, 046 1, 039 3, 972 314	63 59 208 66 66 76 41	82 28 76 27 13 38 40 7	423 309 1,207 215 150 385 405 74	38 26 99 10 9 35 61
GEOCHEMISTRY	407 130 10,969 906 1,970 1,451 795 615	185 22 1,679 428 214 1,018 104 253	67 54 1• 085 69 156 124 526 187	6 5 451 27 18 41 68 21	27 94 10 22 33 4 23	24 	70 14 6,177 223 1,428 61 51 68	692 5 37 5 4	5 42 10 5 12 3 6	45 8 585 88 56 120 20	102 17 18 13 2
ATMOSPHERIC DYNAMICS, CHEMISTRY, AND PHYSICS	777 244 3,080 1,230 178	255 44 142 64 22	252 117 977 438 73	6 5 23 44	38 50 1,528 475 22	76 5 48 14	308 123 15 250 164 42	2 1 11 4	2 1 6 6	27 19 5 88 19	12 4 1 7 2
ACOUSTICS	1,381 1,772 1,666 1,349 943 3,170 2,371 1,781 4,151 635 3,682 889 1,721 1,187	317 967 474 975 310 1,544 452 705 1,507 246 2,769 430 340 575	296 183 281 55 185 273 342 266 344 113 143 150 180 102	6 8 4 9 5 18 4 8 6 2 7 4 2 6	23 24 27 13 14 122 44 32 27 7 36 23 46 35	54 53 66 97 18 157 85 97 114 17 64 100 43	623 404 739 76 358 902 1,315 603 1,922 209 365 106 1,042 290	28 1 12 3 7 7 8 42 7 13 2 5 3	7 7 2 2 4	29 120 60 110 45 130 77 61 197 33 276 71 40	2 10 2 11 1 9 10 1 19 4 13 2
ALGEBRA	1, 633 2, 785 798 381 4, 237 330 5, 729 637 433 448	1,318 2,205 702 278 499 261 841 536 229 337	38 88 12 1 376 18 534 5 25	20 34 9 3 64 5 49 9 3 15	16 40 2 1 108 2 94 5 8	11 30 11 10 369 6 349 17 20 5	105 267 29 72 2,631 15 3,620 22 129 45	3 7 2 2 60 39	4 6 1 2 22 1 36 6 2	101 104 93 27 10 86 18 152 36 13 23	21 14 15 3 2 22 4 15 1
AGRONOMY	1,168 680 1,407 4,008 872 1,391	601 476 178 395 589 594	222 48 477 1,920 84 544	58 16 664 621 28 53	2 7 34	19 8 16 32 9	213 90 26 827 104 122	21 23 12 92 16 10	4 5 3 13 3 8	19 9 17 52 31	11 3 7 22 8
AYATOMY	1,096 556 2,785	828 1,669 788 858 920 376 1,225 669 544 573 2,040 625 249 2,122 1,369 411 606	30 224 152 542 120 88 376 101 67 97 256 252 63 176 198 116 58	13 53 85 190 35 27 150 20 36 46 53 65 29 132 207 23	11 5 7 72 9 26 101 15 62 34 95 3 32 24 267 25 2	48 61 17 40 45 107 210 44 233 69 275 16 52 81 378 76 23	28 74 31 271 82 63 593 283 52 476 144 84 104 59 189 110 77	20 6 4 36 3 21 22 20 52 22 63 4 2 8 343 5	3 10 6 21 11 5 20 9 5 3 18 5 4 30 40 2	21 130 51 61 74 19 75 26 11 19 59 32 20 135 31 60 15	4 12 6 19 10  21 9 5 6 11 10 11 18 25 7

					TYPE OF E	MPLOYER					
SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	EOUCA- TIONAL INSTI- TUTIONS	FEDERAL GOVERN- MENT	OTHER GOVERN- MENT	MILITARY	NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF- EMPLOYED	OTHER		NO REPORT OF TYPE OF EMPLOYER
CLINICAL PSYCHOLOGY	6•151	1,814	629	1.332	88	874	109	890	107	260	48
COUNSELING AND GUIDANCE	1•831 510	1,133	176 15	144 30	2	178 47	36	70 10	26	54 44	12
EDUCATIONAL PSYCHOLOGY	1,427	1,085	28	89	5	55	48	16	40	51	10
ENGINEERING PSYCHOLOGY GENERAL PSYCHOLOGY	377 141	28 108	53	3 4	25 2	35 6	225	1	2	13	2 4
INDUSTRIAL AND PERSONNEL PSYCHOLOGY	1+367	257	117	44	22	74	693	90	28		8
PERSONALITY	479 939	330 729	34	32 96	7	32 12	8 5	13	32	16	3 9
SCHOOL PSYCHOLOGY	739	127	,					Į	ļ		
PHYSIOLOGICAL PSYCHOLOGY	1,912	1,303	163 75	57 22	46	120	125	13	12		8
PSYCHOMETRICS	1.004	243 714	64	31	19	74	47	17	7	28	3
PSYCHOLOGY. OTHER	199	74	12	17	3	21	11	12	3	36	10
STATISTICS	2 • 843	778	568	122	31	139	1.055	25	38	66	21
GENERAL ECONOMIC THEORY ECONOMIC HISTORY, HISTORY OF	1 • 241	786	73	26	6	55	197	6	20	1	12
THOUGHT	265	214	9	4	2	6	6	1	1	1	2
AND PLANNING ECONOMIC STATISTICS	864 483	387 253	168 83	47 11	5 2	72 32	109 63	12	26		8 11
MONETARY AND FISCAL THEORY AND INSTITUTIONS	978	570	98	38	2 6	34	113	8 10	54 30		4 5
INTERNATIONAL ECONOMICS BUSINESS FINANCE AND ADMINISTR-	532	243	112	15	39	96	3,045	98	28	1	25
ATION, MARKETING AND ACCOUNTING - INDUSTRIAL ORGANIZATIONS, GOVERN- MENT AND BUSINESS, INDUSTRY	4,742	1,111	126				225	21	10		6
STUDIES	1,254	313 684	122	30 38	7 9	33	78	23	14		16
LABOR ECONOMICS	662	377	112	46	2	34	27	9	13	39	3
POPULATION, WELFARE PROGRAMS, STANDARDS OF LIVING	164	69	40	14		17	12	1	2	2 7	2
ECONOMICS, OTHER	154	54	20	6	3	19	28	5	1	1	2
APPLIED SOCIOLOGY	63	40	4	4	1	8 5	1 3	2		- 3 - 13	1
GENERAL SOCIOLOGY	265 268	233 179	22	111		20	27	i	2	2 6	
POPULATION	173	91	32	21	1	11	3		5		3
RURAL-URBAN SOCIOLOGY	349 178	265	12	8 2	1	20 12	2 5	3		13	i
SOCIAL CHANGE AND DEVELOPMENT SOCIAL ORGANIZATION, STRUCTURE,  AND INSTITUTIONS	1.064	874	28	30	4	70	13	7	7	7 29	2
SOCIAL PROBLEMS, SOCIAL DISORGANIZATION	314	238 27	14	32 1	3	13	1	1 3		- 11 - 5	1
	392	257	50	11		.7	21			3 30	3
APPLICATION TO LANGUAGE TEACHING OESCRIPTIVE LINGUISTICS GENERAL LINGUISTICS	407 81	262 54	5	4 2	1	60	10	3		3 47	
HISTORICAL AND COMPARATIVE LINGUISTICS	210	183	5	4		1				- 16	1
LANGUAGE IN RELATION TO OTHER FIELDS	158	122	4	4		5	6	1		2 15	
LANGUAGE POLICIES	16	_	1			8	1				1
MECHANIZED APPLICATIONS	27		1			2 2				- 4 - 3	
PHONETICS	28 29		2			i				- 4	1
OTHER SPECIALTIES	6,158 14,612		411 1+142	182 276	131 447	261 263				2 327 2 652	

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

					HORK AC	TIVITY					
SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	RESEAR	CH AND DEV	ELOPMENT	HANAGEM AOMENIS			PRODUCTION		NOT ENPLOYED	NO REPORT OF WORK
		TOTAL (A)	8ASIC RESEARCH	APPLIED RESEARCH	TOTAL (8)	OF R+D	TEACHING	ANO INSPECTION	OTHER		ACTIVITY
ALL SUBFIELOS	223,854	77,699	35,781	30,280	46,255	24,568	41,209	16,582	26,301	9,617	6,191
ANALYTICAL CHEMISTRY	8,878 5,192 24,162 6,578 3,228 6,340 7,940 735	3,192 1,813 10,800 2,339 931 3,263 4,477 130	1+047 882 4+015 179 276 3+421 +604 48	1,768 716 4,833 649 517 495 1,577	1,410 1,066 5,963 1,467 1,035 764 1,246 174	758 680 4,284 728 633 496 1,052	888 687 1,715 252 130 657 1,080	2+347 - 800 3+042 1+949 - 742 - 206 - 327 - 72	374 192 832 239 130 209 204	423 309 1,207 215 150 365 405 74	244 125 603 117 110 156 201 34
GEOCHEMISTRY GEODES Y	407 130 10,969 906 1,970 1,451 795 615	214 28 1,230 272 329 151 255 309	169 11 736 202 160 88 104 208	44 17 490 70 164 62 151 94	30 53 1.510 51 371 122 223 125	26 23 493 24 115 56 108 87	73 14 1, 133 243 60 836 43 73	10 2 796 17 29 15 26 4	22 22 5:375 192 1,084 165 207 70	45 8 585 88 56 120 20 13	13 3 340 43 41 42 21 21
ATMOSPHERIC DYNAMICS, CHEMISTRY, AND PHYSICS	777 244 3,080 1,230 178	516 66 271 134 56	358 23 91 38 9	153 43 180 93 36	108 50 699 344 64	92 20 112 74 48	59 28 94 35 6	2 1 27 34 3	44 85 1,797 637 33	27 19 5 88 19 9	105 29 9 104 27 7
ACOUSTICS	1,381 1,772 1,666 1,349 943 3,170 2,371 1,781 4,151 635 3,682 889 1,721 1,187	721 1,124 926 923 428 1,801 1,391 1,201 2,832 387 912 517 814 368	223 944 301 813 115 1,088 354 709 1,931 218 655 387 110 192	338 154 463 62 193 490 642 422 710 103 189 92 282 104	378 122 330 96 182 553 501 251 483 74 211 99 515 223	278 92 266 74 149 442 381 231 415 55 114 765	128 343 239 164 228 468 205 197 476 100 2,132 149 198 341	15 6 17 2 12 27 22 13 27 8 9 2 45	92 19 62 133 115 110 25 47 21 78 20 84 54	29 120 60 110 45 130 77 61 197 33 276 71	18 38 32 39 15 76 65 33 89 12 64 31 25
ALGEBRA	1,633 2,785 798 381 4,237 330 5,729 637 433 448	259 695 103 127 1.257 60 2.625 228 185 48	182 475 78 86 151 46 318 209 92 22	56 180 21 19 813 13 936 12 82	86 166 36 28 1,571 21 1,424 25 55 32	27 89 12 13 875 11 831 10 35	1,071 1,637 589 195 247 204 330 307 139 304	13 24 6 3 439 7 564 2	61 88 17 10 557 13 531 23 17 23	104 93 27 10 86 18 152 36 13 23	39 82 20 8 80 7 103 16 10
AGRONOMY	1,168 680 1,407 4,008 872 1,391	589 204 459 432 410 635	138 60 166 101 71 311	443 139 281 295 334 320	268 176 675 2,709 176 283	159 104 349 286 113 125	129 191 84 203 146 140	55 10 16 109 9 58	59 56 111 369 53 187	19 9 17 52 31 32	49 34 45 134 47 56
ANATOMY	1,006 2,244 1,147 2,110 1,309 732 2,793 1,196 1,067 1,345 3,014 1,096 2,785 3,047 835 853	233 728 320 883 716 470 1,132 568 431 644 1,629 731 353 669 942 435 96	204 606 227 440 579 374 709 326 291 409 1,196 422 272 579 327 344 63	29 118 91 431 136 96 404 236 140 229 431 305 80 87 612 80 26	108 166 141 482 117 87 562 296 154 359 305 122 94 257 580 156	51 85 75 212 90 64 322 225 87 300 233 89 68 133 336 72 50	549 1.082 570 352 347 92 654 168 178 209 764 95 55 1,548 515 89 518	2 16 3 89 2 11 93 41 5 17 4 16 3 7 11 18	64 59 39 152 18 33 198 56 215 57 157 56 13 94 794 45 37	21 130 51 61 74 19 75 26 11 19 59 32 20 135 31 60 15	29 63 23 91 35 20 79 41 73 40 96 44 18 75 174 32 53

		:			WORK AC	TIVITY					_
SCIENTIFIC AND TECHNICAL SUBFIELD	TOTAL	RESEAR	CH AND DEV	ELOPMENT	HANAGEN AOMINIS	ENT OR TRATION		PRODUCTION		NOT EMPLOYEO	NO REPORT OF WORK
	-	TOTAL (A)	8ASIC RESEARCH	APPLIED RESEARCH	TOTAL (8)	OF R+O	TEACHING	AND INSPECTION	OTHER		ACTIVITY
CLINICAL PSYCHOLOGY	6,151	1,100	126	967	692	153	699	1	3,270	260	129
COUNSELING AND GUIDANCE DEVELOPMENTAL PSYCHOLOGY	1,831 510	125 127	10 85	112 40	349 58	56 25	458 214	1	815 55	54 44	29 12
EDUCATIONAL PSYCHOLOGY ENGINEERING PSYCHOLOGY	1,427 377	287 201	35 13	243 140	390 138	108	514	1	151	51 3	33 5
GENERAL PSYCHOLOGY	141	13	9	3	14	121	13 91	******	17	13	4
INOUSTRIAL AND PERSONNEL PSYCHOLOGY	1,367	243	22	207	558	212	152	8	346	34	26
PERSONALITY	479	154	96	55	52	32	204		39	16	14
SCHOOL PSYCHOLOGY	939	410	2	406	96	15	62		298	43	30
PHYSIOLOGICAL PSYCHOLOGY PSYCHOMETRICS	1,912 467	891 197	719 60	160	192	148	672		58	65	34
SOCIAL PSYCHOLOGY	1,004	317	205	126 108	108 170	73 115	120 427		22	11 28	9 19
PSYCHOLOGY, OTHER	199	43	15	28	32	18	44	*****	28	36	16
STATISTICS	2,843	854	170	552	694	346	484	374	289	66	82
GENERAL ECONOMIC THEORY Economic History, History	1,241	236	91	143	179	92	614	32	81	60	39
OF THOUGHT	265	24	14	10	23	4	180	1	11	20	6
AND PLANNING	864 483	198 153	79 58	118 94	223 81	135 43	248 156	40 22	92 30	30 19	33 22
MONETARY AND FISCAL THEORY AND INSTITUTIONS	978	157	57	100	186	77	449	15	73	57	41
INTERNATIONAL ECONOMICS BUSINESS FINANCE AND ADMINISTR-	532	77	24	53	121	59	201	12	75	30	16
ATION, MARKETING AND ACCOUNTING - INDUSTRIAL ORGANIZATIONS, GOVERN- MENT AND BUSINESS, INDUSTRY	4,742	279	48	195	1,980	514	799	981	419	158	126
STUDIES	804 1,254	142 504	33 119	104 385	231 268	100	232 231	57 29	99 115	26 48	17 59
LABOR ECONOMICS POPULATION, WELFARE PROGRAMS,	662	94	40	54	157	74	282	12	57	39	21
STANDAROS OF LIVING ECONOMICS, OTHER	164 154	39 24	14 7	24 16	44	23 20	45 32	6	15 24	7 16	8 9
APPLIED SOCIOLOGY	63	14	3	11	23	11	19		3	3	1
GENERAL SOCIOLOGY	265 268	22	17	5	16	9	201		6	13	7
METHODOLOGY	173	91 52	48 31	41 21	60 43	48 24	93 50	3 5	11	6 9	6
RURAL-URBAN SOCIOLOGY	340 178	86 47	43	42 15	55	29 25	164		12		10
SOCIAL ORGANIZATION, STRUCTURE,			31		38		68	1	9	•	7
ANO INSTITUTIONS	1,064	222	165	57	147	70	613		32	29	21
DISORGANIZATION	31 4 38	51 8	35 7	16 1	56 2	31	177 21		10 1	11 5	9
APPLICATION TO LANGUAGE TEACHING -	392	30	5	24	78	25	201	1	35	30	17
DESCRIPTIVE LINGUISTICS GENERAL LINGUISTICS	407 81	87 24	62 17	25 6	33 7	13 2	187 36	1 2	28	47	24
HISTORICAL AND COMPARATIVE LINGUISTICS	210	16	15	1	16	6	149		5	16	8
LANGUAGE IN RELATION TO OTHER FIELOS	158	25	15	10	20	8	91		5	15	2
LANGUAGE POLICIES	3 16	1 5	1 2	3	4	<u>1</u>	4		2 2		1
MECHANIZED APPLICATIONS	27	14	5	7	4	4	3			4	2
PHONETICS	28 29	10 2	9 1	1	5 4	1	15		2	3 4	1 2
OTHER SPECIALTIES	6,158 1 <b>4,</b> 612	416 4,432	131 386	161 1,430	1.095	384 2,483	3+000 851	139 2,432	1,037 1,296		144 340

<sup>(</sup>A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.



SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

TABLE A-40 -- NUMBER OF SCIENTISTS, BY SUBFIELD AND YEARS OF PROFESSIONAL EXPERIENCE, 1964

SCIENTIFIC AND TECHNICAL SUBFIELD	YEARS OF PROFESSIONAL EXPERIENCE						NO REPORT	
	IOIAL	1 YEAR	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20 OR MORE YEARS	OF YEARS OF EXPERIENCE
ALL SUBFIELOS	223+854	8,303	34,864	45,249	42,706	26,304	53,778	12,650
ANALYTICAL CHEMISTRY	8.878 5.192 24.162 6.578 3.228 6.340 7.940	503 278 1•194 378 78 340 495 25	1,383 708 3,214 1,019 327 1,095 1,418 78	1,675 827 3,817 1,173 425 1,217 1,573	1,776 893 4,165 1,167 523 1,211 1,380	982 509 2,619 801 421 709 729	2.032 1.561 7.248 1.706 1.306 1.257 1.611 287	527 416 1,905 334 148 511 734
GEOCHEMISTRY	407 130 10,969 906 1,970 1,451 795 615	48 416 83 52 120 10 39	97 16 1,171 175 188 281 58 117	84 21 2,203 168 327 259 117 129	55 26 2,789 145 448 239 167 126	37 19 1.531 61 348 150 112 70	43 37 2• 223 154 519 249 289 99	43 7 636 120 88 153 42 35
SPECIALTIES, OTHER	664	9	54	91	98	75	187	150
ATMOSPHERIC DYNAMICS, CHEMISTRY AND PHYSICS CLIMATOLOGY	777 244 3,080 1,230 178	38 4 84 17 6	1 53 22 405 1 08 20	176 40 493 195 37	152 46 553 230 38	70 37 594 265 22	148 86 841 378 53	40 9 110 37 2 1
ACOUSTICS	1.381 1.772 1.666 1.349 943 3.170 2.371 1.781 4.151 635 3.682 889 1.721 1.187	28 134 47 122 37 167 60 72 199 31 191 61 34	211 548 323 466 205 785 487 409 1,086 181 1,011 237 297 241	294 426 393 306 202 767 486 425 1+054 144 755 202 411 178	275 228 326 163 160 598 449 367 809 95 529 132 352 151	156 99 173 67 109 294 264 194 345 52 308 55 189	380 189 356 94 207 392 573 241 434 90 715 154 400 259	37 148 48 131 23 167 52 73 224 42 173 48 38
LGEBRA	1,633 2,785 798 381 4,237 330 5,729 637 433 448	29 67 11 7 31 9 55 18 13 6	414 657 117 73 553 65 1,017 216 93 57	421 688 184 118 1,097 81 2,347 169 125 98	264 442 111 71 1.047 57 1.371 96 87 84	131 228 78 40 583 32 438 45 43	313 592 270 53 836 67 356 52 49	61 111 27 19 90 19 145 41 23
GRONOMY	1,168 680 1,407 4,008 872 1,391	32 14 31 61 22 29	129 92 285 683 102 160	221 133 308 903 152 291	252 137 310 794 161 269	168 92 198 515 139 197	320 186 238 939 263 391	46 26 37 113 33 54
NATOMY	1,006 2,244 1,147 2,110 1,309 732 2,793 1,196 1,067 1,345 3,014 1,096 556 2,785 3,047 835 853	14 97 50 31 58 11 70 38 13 14 60 43 9 89 73 29	116 423 286 286 304 116 350 143 83 148 377 194 60 607 254 148 112	163 520 281 400 260 173 506 230 169 279 656 2-00 126 651 480 169 165	203 350 185 403 250 159 584 225 198 310 649 152 442 512 162	111 187 111 252 142 78 349 117 163 173 397 114 50 268 461 114 96	358 549 193 653 222 169 802 389 362 738 243 141 600 1,119 156 270	41 118 41 85 73 26 132 63 52 59 137 63 18 128 148

SCIENTIFIC AND TECHNICAL SUBFIELD			YEA	RS OF PROFE	ESSIONAL E	XPER I ENCE		ND occor
	TOTAL	1 YEAR	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20 DR MORE YEARS	ND REPORT OF YEARS OF EXPERIENCE
CLINICAL PSYCHOLOGY					1			
COUNSELING AND GUIDANCE	6,151	88	875	1,447	1,591	770	1,041	339
UEVELUPMENTAL PSYCHOLOGY	1,831	16	186	325	397	282	521	104
EUUCATIONAL PSYCHOLOGY	1,427	14	82	98	107	61	130	22
ENGINEERING PSYCHOLOGY	377	5	108	286	288	217	443	71
GENERAL PSYCHOLOGY	141	1 2	15	95 21	118	56	35	20
INDUSTRIAL AND PERSONNEL PSYCHOLOGY	1,367	18	107	215	18 358	22	53	10
PERSONALITY	479	21	72	105	115	232	338	99
SCHOOL PSYCHOLOGY	939	9	130	281	221	99	73	38
EXPERIMENTAL, COMPARATIVE, AND PHYSIOLOGICAL PSYCHOLOGY	1		1		1	77	159	40
PSYCHOMETRICS	1,912	106	470	469	371	149	229	118
SOCIAL PSYCHOLOGY	467	9	72	102	104	66	92	22
PSYCHOLOGY, OTHER	1,004	36	167	247	228	127	164	35
	199	3	15	29	36	26	43	47
STATISTICS	2,843	?2	422	668	620	411	400	
GENERAL ECONOMIC THEORY		ł			525	741	609	91
ECONOMIC HISTORY, HISTORY OF THOUGHT	1,241	55	190	229	212	180	296	79
ECONOMIC SYSTEMS, DEVELOPMENT AND PLANNING	265	6	39	38	43	32	85	22
ECONOMIC STATISTICS	864	34	122	163	157	118	217	53
MONETARY AND FISCAL THEORY AND INSTITUTIONS	483	31	98	91	69	50	107	37
INTERNATIONAL ECONOMICS	978 532	34	163	157	145	127	275	77
BUSINESS FINANCE AND ADMINISTRATION.	332	22	55	96	88	57	171	43
MARKETING AND ACCOUNTING INDUSTRIAL DRGANIZATIONS, GOVERNMENT AND	4,742	97	415	766	855	751	1,585	273
BUSINESS, INCUSTRY STUDIES	804	20	89	108	143	106	290	
LAND ECONOMICS	1,254	50	183	215	215	176	328	48 87
POPULATION, WELFARE PROGRAMS, STANDARDS	662	16	69	84	101	96	241	55
UF LIVING	164	3	14	23	25	30		
ECONDMICS, OTHER	154	4	9	23	25	20 16	69 56	10 21
APPLIED SOCIOLOGY	63		1	11	17			
GENERAL SOCIOLOGY	265	3	16	49	60	6 46	23	5
METHODOLOGY	268	2	29	85	62	34	78 49	13
RURAL-URBAN SOCIOLOGY	173		19	34	29	25	61	7 5
SOCIAL CHANGE AND DEVELOPMENT	340	6	23	74	76	44	105	12
SOCIAL ORGANIZATION, STRUCTURE,	178	3	19	33	29	25	61	8
AND INSTITUTIONS	1,064	19	121	334	3/.			
SOCIAL PROBLEMS, SOCIAL DISORGANIZATION	314	2	26	236 76	241	165	250	32
SOCIOLOGY, OTHER	38		i	10	59 6	46	97 15	8
APPLICATION TO LANGUAGE TEACHING	392	7	٠, ١			1	45	3
DESCRIPTIVE LINGUISTICS	407	17	56 76	108	85	56	74	6
SENERAL LINGUISTICS	81	٤ ا	15	91	75	31	72	45
HISTORICAL AND COMPARATIVE LINGUISTICS	210	5	21	16 49	13	3	19	9
LANGUAGE IN RELATION TO DIHER FIELDS	158	6	22	29	40 20	22	59	14
LANGUAGE POLICIES	3				1		46	14
LITERACY AND WRITING SYSTEMS	16		3	4	3	2	1 2	1
MECHANIZED APPLICATIONS	27	1	7	8	7	2	2	2 2
LINGUISTICS, OTHER	28	2	7	4	7		7	1
	29	1	3	7	6	3	· ·	4
OTHER SPECIALTIES	6,158	147	944	, ,,,,				•
ENGINEERING	14,612	716	944	1,378	1.077	721	1,653	238
	,		1,700	21301	2,498	1,950	4,243	732

SDURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-41.—HOMOER OF SOLEMISTS RESERVING							
		NUMBER		GOVERNME	NTAL PROG	RAMS	
SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	TOTAL	RECEIVING SUPPORT	AGRICULTURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH
ALL FIELDS	223,854	97,004(1)	10,957	11,267	29,399	8,679	20,736
PH.O	79,372 5,925 61,222 72,364 2,878 2,093	39,613 4,235 23,752 27,116 1,549 739	5,501 77 2,618 2,610 92 59	5,093 130 2,694 3,239 67 44	8,954 271 8,360 10,600 871 343	4,400 246 2,611 1,353 26 43	12,204 3,641 2,470 2,298 52 71
CHEMISTRY	63,053	19,305	1,582	3,361	5,667	1,280	6,029
PH. D	21,789 368 12,229 27,377 590 700	8,870 292 3,375 6,566 90 112	819 1 317 423 6 16	1,477 12 616 1,230 14 12	2,162 11 1,040 2,369 46 39	794 15 212 252 3 4	3,668 267 762 1,300 9 23
EARTH SCIENCES	17,907	4,808	226	371	1,232	340	58
PH.D	3,578 1 5,829 8,101 254 144	1,438  1,499 1,791 56 34	51 79 91 3 2	127 110 131 2	309  418 477 21 7	110 76 1	36 55 2
METEOROLOGY	5,510	4,814	327	223	2,428	136	203
PH.D	479		31 60	78	161  514 1,060	22 38 60	32 62 90
BACHELUR'S	2,524 - 1,147 - 223		171 54 11	78 22 8	582 111	13	16
PHYSICS	26,698	16,718	60	4,371	8,100	1,055	422
PH.D	- 10,286 - 30 - 8,352 - 7,673	21 4,704	24  12 22	2,343 1 1,081 924	3,064 9 2,346 2,553	1 326	213 6 94 102
BACHELOR'S	185	118	1	13			5 2
MATHEMATICS	17,411	7,818	63	554	<del>                                     </del>	<del>                                     </del>	358 154
PH.D	7,464 4,917 - 210	3,016 2,429	19 17 2	218 179	1,748	395 107	3 110 83 5
LESS THAN BACHELOR'S NO REPORT	212		1	1		+	3
AGRICULTURAL SCIENCES	9,526	-+	3,701	93	+	<del></del>	77
PH.D	2,367 11 2,676 4,366	1,709 2,989	1,384 1 965 1,326	17	38	47 59 1	1 38 20 1
LESS THAN BACHELOR'S	4		15		+	2	9,116
BIOLUGICAL SCIENCES	27,13		2,215	95			<del></del>
PH.D	13,35 5,40 5,02 3,17 7	8 3,859 8 2,093 2 1,357 1 24	74 573 370 10	11 13 10	5 24 5 18 6 13	3 222	555 352 6
NO REPORT	16,80	<del></del>	44	5	6 1,17	8 1,666	2,899
	10.84	3 4,664	32	4	0 75	2 2	24
PROFESSIONAL MEDICAL	5,46	4 1,553 7 142	6 5	1	5 38 1 3		50
LESS THAY BACHELOR'S	2	4 7	1		-	1	276
STATESTICS	2,84	<del></del>	95		2 17	<del>-                                    </del>	
PH.O	 1,1; 8;	10 433	45 20		14 24	1 2	1 3
LESS THAN BACHELOR'S		3 23 50 21	2		1		6

NETHINATIONAL   MATCHARD   POBLICE   SPACE   OTHER							T	Γ	
ALL FIELDS   1.095   0.422   1.296   13,625   13,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   15,144   104,833   0.135   104,834   0.145			GOVERNMENTA	L PROGRA	MS		NO	SUBBOOT	
PADDESSIONAL REDIGAL  1800 1-610 1-6	SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	INTERNATIONAL			SPACE	OTHER		STATUS	REPORT
PAGESSIONAL RECICAL  44 1.59 23 3.09 320 3.014 3.164 3.00 0.05 2.037 5.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05	ALL FIELDS	1,835	6,822	1,298	13,625	13,144	104,853	6,134	15,863
MASTERS'S  A00 1,150 200 30 30 30 30 30 30 30 50 50 50 50 50 50 50 50 50 50 50 50 50		890	1,610	231	4,309	5,538	34.188	1.312	4,259
### STEAMS ALCHEODYS   101   3-216   683   4-964   3-62   37-027   3-525   5-55	MASTER+S		1.859		1		1,397	67	226
ROREORY		401	3,216	683					5.366
The Prince of				1 -		1		•	178
PROPESSIONAL MEDICAL  PROFESSIONAL MEDICAL	CHEMISTRY				<del></del>				174
## PAGESSIONAL REDICAL  ## PAGE STORM ACMEDIAN  BACHELORYS  ## PAGE STORM ACMEDIANS  ## PAGE STO			<u> </u>	<del> </del> -	<del> </del>	<del>                                     </del>			4,542
BACHELOR'S   45   135   68   110		2	1	1	6	15	51	4	1,070 21
LESS TRAMS BACHELOR'S 1 4 4 22 12 503 39 9	BACHELOR'S			1					1,035
EARTH SCIENCES  101 1.624 336 319 10.064 11,238 314 1, PH-DP PROFESSIONAL MEDICAL  609 431 40 111 432 1,850 37 PROFESSIONAL MEDICAL  609 431 40 111 432 1,850 37 PROFESSIONAL MEDICAL  609 431 40 111 432 1,850 37 PROFESSIONAL MEDICAL  609 431 40 111 432 1,850 37 PROFESSIONAL MEDICAL  609 431 40 111 422 1,850 37 PROFESSIONAL MEDICAL  609 431 40 111 422 1,850 37 PROFESSIONAL MEDICAL  609 431 40 111 422 1,850 37 PROFESSIONAL MEDICAL  609 431 40 111 422 1,850 37 PROFESSIONAL MEDICAL  609 431 40 111 422 1,850 37 PROFESSIONAL MEDICAL  609 431 40 110 5056 1,565 40 40 45 PROFESSIONAL MEDICAL  609 431 40 150 556 1,565 40 PROFESSIONAL MEDICAL  609 431 40 150 556 1,565 40 PROFESSIONAL MEDICAL  609 431 40 150 556 1,565 40 PROFESSIONAL MEDICAL  609 431 41 110 6056 1,565 40 PROFESSIONAL MEDICAL  609 431 41 110 6056 1,565 40 PROFESSIONAL MEDICAL  609 431 41 110 6056 1,565 40 PROFESSIONAL MEDICAL  609 431 41 110 6056 1,565 40 PROFESSIONAL MEDICAL  609 431 41 110 6056 1,565 40 PROFESSIONAL MEDICAL  609 400 400 400 PROFESSIONAL MEDICAL  600 400 400 FROM FROM FROM FROM FROM FROM FROM FROM		1	-		21	4	419	40	41
PALO STORY S		101		<del>                                     </del>		<del></del>			46
PROFESSIONAL MEDICAL  ***ASTER**S** **PROFESSIONAL MEDICAL  **PROFESSIONAL MED					-				1,547
## ACHELOR'S	PROFESSIONAL MEDICAL			_				3	253
LESS THAN BACHELORYS  MO REPORT  143  214  105  556  1,585  440  45  MRTEOROLOGY  143  214  105  556  1,585  440  45  MRTEOROLOGY  143  214  105  556  1,585  440  45  MRTEOROLOGY  143  214  105  556  1,585  440  45  MRTEOROLOGY  143  214  105  556  1,585  440  45  MRTEOROLOGY  143  214  105  556  1,585  440  45  MRTEOROLOGY  143  214  105  556  159  88  47  4  4  MRTEOROLOGY  130  131  112  144  145  145  145  145  147  147  147							3,741		503
METEOROLOGY 143 214 105 656 1,595 440 45 1  PH-D. 143 214 105 656 1,595 40 440 45 1  PH-D. 15 15 15 88 47 4 4 105 656 1,595 11 19 19 15 19 19 19 19 19 19 19 19 19 19 19 19 19		4		1				1	745 32
PHILD: STANLA HEDICAL 14 26 5 159 88 47 4 4 PROFESSIONAL HEDICAL 25 138 55 7 PROFESSIONAL HEDICAL 26 1195 251 85 7 PROFESSIONAL HEDICAL 27 PROFESSIONAL HEDICAL 27 PROFESSIONAL HEDICAL 27 PROFESSIONAL HEDICAL 28 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 29 PROFESSIONAL HEDICAL 20 PROFESSIONA				<u> </u>	<u> </u>				14
PROFESSIONAL MEDICAL  ***TABLE STORM ASCRELOR'S  ***TABLE STORM ASCRELOR'S  ***PARTIESS  ***TABLE STORM ASCRELOR'S  ***PARTIESS  ***PAR	1		-	<del></del>	-				211
MASTER'S - 29 24 4 751 331 112 90 10 10 10 10 10 10 10 10 10 10 10 10 10	PROFESSIONAL MEDICAL	1		_	1		47		21
STATE   STAT								7	50
NO REPORT 4 3 2 20 69 22	LESS THAN 8ACHELOR'S								78 53
PH.D.	NO REPORT	4							79
PROFESSIONAL MEDICAL	PHYSICS	113	112	44	4,607	1,762	6,838	648	2,494
MASTER'S 26 37 12 1,310 439 2,420 239 8 6ACHELOR'S 11 45 117 1,473 426 1,792 248 1ESS THAN BACHELOR'S 1 1 1 46 5 57 4 1 1 1 46 5 57 4 1 1 1 1 46 5 57 4 1 1 1 1 46 5 57 4 1 1 1 1 46 5 57 4 1 1 1 1 46 5 57 4 1 1 1 1 46 5 57 4 1 1 1 1 46 5 57 4 1 1 1 1 46 5 57 1 1 1 1 1 46 5 57 1 1 1 1 1 46 5 57 1 1 1 1 1 1 46 5 57 1 1 1 1 1 1 46 5 57 1 1 1 1 1 1 46 5 57 1 1 1 1 1 1 1 46 5 5 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								145	575
LESS THAN BACHELOR'S NO REPORT  HATHCHAITCS  TI TO 66 B 1,933 1,108 7,874 535 1,1 PH.O.  18 14 16 328 577 1,921 152 172 PROFESSIONAL MEDICAL  PH.O.  18 14 16 328 577 1,921 152 152 153 134 161 261 261 263 163 163 163 163 163 163 163 163 163 1			37	12	1,310			239	989
MATHEMATICS	LESS THAN BACHELOR'S						- 1		907 6
Ph.D.	NO REPORT					-			17
PROFESSIONAL MEDICAL	MATHEMATICS	71	76	68	1,933	1,108	7,874	535	1,164
MASTER'S		18	14	16	328	577		152	354
LESS THAN BACHELOR'S   3						331	-	261	576
NO REPORT - 3 1 1 27 5 99 8 A AGRICULTURAL SCIENCES - 76 2,500 155 11 476 2,642 157 3 7	LESS THAN BACHELOR'S	21					-		232 6
Ph-D.	NO REPORT	3	- 1					_ 1	16
PROFESSIONAL MEDICAL	AGRICULTURAL SCIENCES	76	2 • 500	155	11	476	2,642	157	321
MASTER'S       19       636       30       1       148       787       72       1         BACHELOR'S       19       1,614       110       4       256       1,199       56       1         NO REPORT       1       15        3       12        1       15        3       12        1       1       15        1	PROFESSIONAL MEDICAL				_			1	85 1
LESS THAN BACHELOR'S			636		1	148	787		108
1   15     3   12	LESS THAN BACHELOR'S	1						1	118
PH.D	NO REPORT	11				- 1			5
PROFESSIONAL MEDICAL	BIOLOGICAL SCIENCES	195	751	31	450	1,619	8,756	529	1,727
PROFESSIONAL MEDICAL				,		940	3,839	128	644
BACHELOR'S	MASTER*S								199
NO REPORT			154	- 1	32	162	1,337		537 335
PSYCHOLOGY 126 19 21 323 1,161 8,622 661 1,1  PH.D 107 10 13 209 826 5,353 268 5  PROFESSIONAL MEDICAL 11 2 21		1		1	-	_			2 10
PH.D	PSYCHDLOGY	126	19	21	323	1,161			1,124
MASTER'S				13		826	5,353		558
BACHELOR'S	MASTER*S		,	A					3
NO REPORT 1 3 7 1  STATISTICS 1  PH-D	8ACHELOR * S	L L			12				508 46
PH.D					1	ı		1	9
PROFESSIONAL MEDICAL	STATISTICS	37	36	23	229	375	1.152	70	137
MACTERIC		1	- 1	1	62		312	27	34
	MASTER'S	1 13	13	10	96	126	468	27	65
8ACHELOR*S 17 12 12 69 139 335 13		17	12	12	69	139	335	13	29
NO REPORT 2 2 2 1 6 20 3		i							3 6

TABLE A-41.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, HIGHEST DEGREE, AND PROGRAM, 1964-CONTINUED

		NUMBER		GOVERNM	ENTAL PRO	GRAMS	
SCIENTIFIC AND TECHNICAL FIELD And Highest Degree	TOTAL	RECEIVING	AGRICULTURE	ATOMIC ENERGY	DEFENSE	EOUCATION	HEALTH
ECONOMICS	12,143	3,589	1.275	115	557	255	141
H.D		1.685	722	26	166	145	66 1
ACHELOR'S	4.204	1,295	470 78	43 42	207 174	87 21	45 28
LESS THAN BACHELOR'S	90	15 30	4	1	6 4	2	1
SOCIOLOGY	2,703	985	114	3	65	226	447
H.D	9	806	161	2	47	197	375 7
ASTER*S	434	144	10	1	11 5	25 1	58 6
ESS THAN BACHELOR'S	3	4			2	1	1
LINGUISTICS	1 • 351	403	3	4	92	194	39
H.D	729	239			.45	132	26
ACHELOR'S	407	102 48	1 2	2 2	27 16	37 20	9
ESS THAN BACHELOR'S	1 50	1 12			4	5	
OTHER FIELDS	20,770	8,154	220	1.078	3,836	1,013	517
H.D	- 34	1,437	70	210	363 6		189
ACHELOR'S	- 6,865		61 82	344 508	1,200		164
ESS THAN BACHELOR'S	217	92	4 3	5 9	48	2	

TABLE A-41.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, HIGHEST DEGREE, AND PROGRAM, 1964—CONTINUED

		GOVERNMENTA	L PROGRA	AMS				
SCIENTIFIC AND TECHNICAL FIELD AND HIGHEST DEGREE	INTERNATIONAL	NATURAL RESDURCES	PUBLIC WORKS	SPACE	OTHER	SUPPORT	SUPPORT STATUS UNKNOWN	REPOR
ECONOMICS	477	333	122	234	991	7,536	198	820
PH.D	268	150	47	65	434	3.023	65	316
MASTER'S	149 49 5	129 49 2	41 33	86 77 3	362 182	2.474	90 39	345 132
NO REPORT	6	3	1	3	12	65 94	4	10
SOCIOLOGY	68	12	13	16	263	1.512	35	171
PH.D		<del>9</del>	11	10	200 2	1,213	28	132
NACHELOR * S	,	3	1	5	49 9	253 36	4 2	33 4
NO REPORT				1	3	2 7	1	1
LINGUISTICS	51	2	2	1	87	719	63	166
PROFESSIONAL MEDICAL	24 1	1			45	421	29	40
MASTER'S	16 8	1	1	1	27 12	204 63	20	81
D REPORT #	2		1		3	30	3	5
OTHER FIELOS	158	403	246	2.074	837	10.621	576	1,419
ROFESSIONAL MEDICAL	55	80	32	327	195	1 • 610	47	179
ASTER*S	40 57	107 200	60 142	651 1.044	244 377	16 3 • 420	205	536
ESS THAN BACHELOR • S	2	14	9	26	13	5 • 366 103	319 2	665 20

(1) OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM OD NOT ADD TO TOTAL.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

SCIENTIFIC AND TECHNICAL FIELD AND		NUMBER		GOVERNM	ENTAL PRO	GRAMS	
TYPE OF EMPLOYER	TOTAL	RECEIVING	AGPICULTURE	AYUMIC ENERGY	DEFENSE	EDUCATION	HEAL TH
ALL FIELDS	223,854	97,004(1)	10,957	11,267	29,399	8,679	20,736
EDUCATIONAL INSTITUTIONS	77,727	37,915	5,275	5, 259	4,896	7,117	12,797
OTHER GOVERNMENT	23,405	23.405 3.646	4,650 512	1,001	6,046 137	520 3D1	2,768 1,092
MILITARY	5,522	5,522	9	176	3,634	110	590
INDUSTRY AND BUSINESS	84,421	5,314 19,771	137 256	723 3,675	1,933	342 148	2,226 <b>7</b> 96
SELF-EMPLOYED	4,271	620	42	49	145	59	241
NOT EMPLOYED	1,434	593	30	157	90	56	154
NO REPORT	1+257	218	46	21	40	26	52
CHEMISTRY	63,053	19•305	1,582	2,361	5+667	1,280	6,029
EDUCATIONAL INSTITUTIONS FEDERAL GOVERNMENT	13,616	7,514	589	1,387	717	1.152	3,796
OTHER GOVERNMENT	888	4+004 463	746 46	268 97	· 1 · 223	54 21	877 219
MILITARY	648	648	3	33	360	12	
INDUSTRY AND BUSINESS	1,679	1,065	55 126	202	253 3,003	21 12	726 346
SELF-EMPLOYED	589	62	8	13	28	3	15
NOT EMPLOYED	311	188	9	90	41	3	41
ND REPORT	291	27		· 6	5	2	9
EARTH SCIENCES	17,907	4,808	226	371	1,232	340	152
FEDUCATIONAL INSTITUTIONS FEDERAL GOVERNMENT	4,023	1,361 2,325	42	114	304	277	72
OTHER GOVERNMENT	658	267	157 9	130	469 15	21 7	48 15
MILITARY	241	241		3	164	5	5
INDUSTRY AND BUSINELS	216 8,400	124 423	2 5	23 82	5 <del>4</del> 216	16 9	4 5
SELF-EMPLOYED	821 87	24 35	5	5	5		2
NOT EMPLOYED	962		2	5	4	5	1
NO REPORT	174	8	1		1		
METEUROLOGY	5,510	4,814	327	223	2+428	136	203
EDUCATIONAL INSTITUTIONS	527 1,857	387 1,857	26 289	36 107	106 433	42 \7	36 117
OTHER GOVERNMENT	78	45	204	8	6	ï	20
MILITARY	2,113 152	2+113 134	1 3	17 15	, 649 68	19 6	7
It DUSTRY AND BUSINESS	594	260	2	37	160	i	12
OTHER	16	5 10	1	2	2		1
NOT SMPLOYED	140						<u>-</u>
PHYSICS	26,698	16.718		1			
EDUCATIONAL INSTITUTIONS	11,611	5,877	16	4,371 2,599	8 • 100 1 • 960	1+055 942	236
FEDERAL GOVERNMENT	2,913	2.913	26	201	1.5.7	32	44
OTHER GOVERNMENT	89 473	43 473	2	16 60	361	12	7 13
NONPROFIT ORGANIZATIONS	1,011	863	5	282	437	31	52
INDUSTRY AND BUSINESS	8,954 166	5,457 60	11	1,187	3,627 42	28 5	63 6
OTHER	25	16		10	3		ì
NOT EMPLOYED	1,350 160	16		5	9	1	
MATHEMATICS	17,411	7,818	63	554	4,397	898	358
EDUCATIONAL INSTITUTIONS	7,206	2,395	29	204	590	779	168
FEDERAL GOVERNMENT	1,113 211	1,113	21	34	643	26	63
MILITARY	277	277		13 5	16 210	31 8	24 14
NONPROFIT DRGANIZATIONS	828 6,935	712	4 7	38	578	14	42
SELF-EMPLOYED	115	3,114 31		244	2 • 322 19	25 5	39 5
OTHER	83	37		13	12	6	2
NO REPORT	562 81	20	1	1	7	4	1
AGRICULTURAL SCIENCES	9,526	6,406	3,701	93	147	157	137
EDUCATIONAL INSTITUTIONS	2,833	1,905	1,623	60	27	109	91
FEDERAL GOVERNMENT	3,295 1,440	3,295 1,021	1,701 304	19	70 10	26 13	23 11
MILITARY	47	47	1	i	29	3	1
INDUSTRY AND BUSINESS	99 1,382	19 59	8 24	1 6	1 10	2	5 4
SELF-EMPLOYED	174	24	16			1	
NOT EMPLOYED	36 160	13	7	1		3	2
NO REPORT	60	23	17	1			

SCIENTIFIC AND TECHNICAL FIELD AND		GOVER NMENT A	L PROGRA	MS		NO	SUPPORT	NO
TYPE OF EMPLOYER	INTER MATIONAL	NATURAL RESDURCES	PU8LIC WORKS	SPAC &	OTHER	SUPPORT	STATUS UNKNOWN	REPORT
ALL FIELOS	1.835	<b>6</b> •822	1,298	13,625	13,144	104,853	6,134	15.863
DUCATIONAL INSTITUTIONS	556	1,138	144	2,374	5,293	33,101	3,142	3,569
EDERAL GOVERNMENT	676	4 • 153 931	570 260	2,145 83	4,865 599	3, 245	366	215
îLÎTÂRY	- 60	22	21	306	1,012		24.2	
ONPROFIT ORGANIZATIONS	169	139 376	223	763 7,805	508 632	2,926 61,193	243 2+231	239 1•226
ELF-EMPLOYEO	19	27	26	75	103	3,418 741	82 45	157 55
THER	63		11	53	98			9,617
O REPORT	7	14		19	34	229	25	785
CHEMISTRY	129	740	132	2,772	1,815	36,903	2,303	4,542
OUCATIONAL INSTITUTIONS	30	139 397	17 35	349 296	80D -615	4,726	797	579
THER GOVERNMENT	- 6	23	39	19	30	349	54	22
ILITARY	3	30	3	40 125	143	505	64	45
NOUSTRY AND RUSINESS	34	135	30	1,911	159	30,693	1.361	471
ELF-EMPLOYEO	1 5	8 5	3 2	12	12	489 109	12	26 5
OT EMPLOYED								3,168
D REPORT	1	1			6	32	<del> </del>	226
EARTH SCIENCES	191	207	336	107	457	2,264	170	228
DUCATIONAL INSTITUTIONS	47 87	1 . 223	172	87	385			
THER GOVERNMENT	7 9	96	80	7 6	67 60	345	24	22
ONPROFIT ORGANIZATIONS	- 11	19	4	16	33	76	4	12
NOUSTRY AND BUSINESS	25	62	45	88	42	7,722 766	105	150 29
THER	- 7	7	3	5	13	41	6	5
OT EMPLOYED	1	1		1	4	24	3	962 139
METEOROLOGY	143	214	105	656	1.585	440	45	211
DUCATIONAL INSTRUCTIONS	7 98	26 154	1 98	118 281	84 1,007	86	21	33
THER GOVERNMENT	27	6	3	71	427	22	9	2
ILITARY	- 6	12		53	34	5	2	11
NOUSTRY AND 8USINESS	j	9	3	126	25	309	12	13
THER				i	2	5	1	
OT EMPLOYEO	1			1		1		140
PHYSICS	113	112	44	4,607	1,762	6,838	648	2,494
DUCATIONAL INSTITUTIONS	- 24	31	9	1,077	1,073	3-417	446	871
EDERAL GOVERNMENT	45	49	12	803	467	1	6	
ILITARY	- 2	1	2	65	42			30
ONPROFIT ORGANIZATIONS	10 28	7 24	15	261	73 95	, , ,	15	13
ELF-EMPLOYEO			1	19	5		7	
THER								1,35
D REPORT				5	1	5	1	8
MATHEMATICS	71	76	68	1,933	1,108	<del></del>	535	1,18
OUCATIONAL INSTITUTIONS	12	16 35	12	1 -	698		377	
THER GOVERNMENT	- 1	4	11		22 37	1	11	
ILLITARY	1 9	6	11		37	86		2
NOUSTRY AND BUSINESS	29	12	19		97			1
ELF-EMPLOYEO	2	i	2	3	5	38		1
OT EMPLOYEO				2	8	13	3	56 4
AGRICULTURAL SCIENCES	76	2,500	155	11	476	2,642	157	32
DUCATIONAL INSTITUTIONS	33	194	12				107	6
EDERAL GOVERNMENT	31 6	1,613	102 34	_	137	352		1
The state of the s		2 2			15	1		
ILITARY			1	L				2
ONPROFIT ORGANIZATIONS	2 2	22	7	1 2			_	
ONPROFIT ORGANIZATIONS		5	7		3	145	. ] 3	
ILITARY	. – 2	_			3	145	3	

TABLE A-42 -NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, TYPE OF EMPLOYER, AND PROGRAM, 1964-CONTINUED

		_					
SCIENTIFIC AND TECHNICAL FIELD AND		NUMBER		GOVERNM	ENIAL PRO	GRAMS	
TYPE OF EMPLOYER	TOTAL	RECEIVING SUPPORT	AGR I CULTURE	ATOMIC ENERGY	OEFENSE	EDUCATION	HEALTH
BIOLOGICAL SCIENCES	27,135	16,123	3,247	957	1.122	1,371	9,116
EOUCATIONAL INSTITUTIONS	15,872	9,902	1,945	600	307	1,180	6,182
FEDERAL GOVERNMENT	2,916 1,203	2,916 693	1.110 112	82 27	369 13	53 31	804 403
MILITARY	790	790	4	20	242	15	447
NONPROFIT ORGANIZATIONS	1,775 2,720	1,053 461	34 17	85 125	50 130	56 9	877 186
SELE-EMPLOYED	647	160	6	5	3	7	132
OTHER	202 839	90	3	10	3	14	59
NO REPORT	171	58	16	3	5	6	26
PSYCHOLOGY	16,804	6,397	44	56	1,178	1+666	2,899
EDUCATIONAL INSTITUTIONS	8,162	2,997	26	15	306	1+225	1,517
FEDERAL GOVERNMENT	1,378 1,901	1,378 456	6 2	3 2	269 13	89 132	532 268
MILITARY	230	230		1	118	9	53
NONPROFIT ORGANIZATIONS	1.574	656 442	1 6	14	140 311	128 23	383 31
SFIF-FMPI QYEO	1,144	147	i		10	32	70
OTHER	274 658	65	2	3	6	19	32
NO REPORT	121	26			5	9	13
STATISTICS	2,843	1,484	95	81	578	88	276
EOUCATIONAL INSTITUTIONS	778	328	29	12	104	54	83
FEDERAL GOVERNMENT	568 122	568 78	59 1	2	152 1	21 3	106 22
MILITARY	31	31			19	2	8
NONPROFIT ORGANIZATIONS	139 1,055	88 364	2	5 53	48 247	7	8
SELF-EMPLOYEO	25	10		1	4		3
OTHER	38 66	15		4	3		1
NO REPORT	21	2					1
ECONUNICS	12,143	3,589	1,275	115	557	255	141
EDUCATIONAL INSTITUTIONS	5,061	1,416	771	15	72	176	53
FEDERAL GOVERNMENT	1,274 284	1,274 124	432 18	20	87 4	52 7	39 3
MILITARY	83	83			63	3	
NONPROFIT ORGANIZATIONS	465 3,967	185 408	14 26	11	95 231	12	15 27
SELF-EMPLOYEO	195	20	2	2	2	1	4
OTHER	207 510	61	3				
NO REPORT	97	18	9	l	3	1	
SUCTOLOGY	2,703	985	114	3	65	226	447
EOUCATIONAL INSTITUTIONS	2•080 137	690 137	96 15		34 10	186 15	323 48
FEDERAL GOVERNMENT	115	56				14	33
MILITARY	10	10 66		2	10	1 17	32
INDUSTRY AND BUSINESS	55	10	i	ī	6	1	1
SELF-EMPLOYEO	20 21	10	1		1	1	3 2
NOT EMPLOYED	97						<u>-</u>
NO REPORT	8						
LINGUISTICS	1.351	403	3	4	92	194	39
FEOERAL GOVERNMENT	930 72	256 72	1	1	37 24	149 20	31
OTHER GOVERNMENT	25	18	1		4	10	1
MILITARY	100	21			7	8	1
INDUSTRY AND BUSINE'S	64	30	1	3	18	6	3
OTHER	10	2					1
NOT EMPLOYED #	126 19	3			1	1	
OTHER FIELOS	20,770	3:154	220	1.078	3,836	1,013	517
EDUCATIONAL INSTITUTIONS	5,028	1,887	82 88	216 133	332	846	209 85
FEDERAL GOVERNMENT	1,553 458	1,553 263	12	27	640	37	56
MILITARY	578 524	578 328	8	36 45	404 192	21 24	37 36
NONPROFIT ORGANIZATIONS	11,074	3,409	23	588	2.201	30	71
SELF-EMPLOYEO	359 124	71 51	3 2	10	29	5	4 7
NOT EMPLOYED	979						
NO REPORT	93	14	2	4	4	2	2

SCIENTIFIC AND TECHNICAL FIELD AND		GOVERNMENTA	L PROGRA	MS		No	CURRORY	
TYPE OF EMPLOYER	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER	SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
BIOLOGICAL SCIENCES	195	751	31	450	1,619	8+756	529	1.727
EOUCATIONAL INSTITUTIONS FEOERAL GOVERNMENT	91 51	307	.7	182	970	4,927	408	635
OTHER GOVERNMENT	4	301 106	11	75 11	381 52	431	36	43
NONPROFIT ORGANIZATIONS	14 17	3 20	2 2	40 27	114 59	630	45	47
OTHER	7	8 2	1	103	17	2+171 459	32 2	56 26
NOT EMPLOYEO	9	4		3	7	96	4	12 839
NO REPORT	1			3	6	42	2	69
PSYCHOLOGY	126	19	21	323	1.161	8.622	661	1.124
EOUCATIONAL INSTITUTIONS FEDERAL GOVERNMENT	48 23	7	3 6	62 43	318 502	4,571	344	250
OTHER GOVERNMENT	3 2	1	4	6	9 <b>8</b> 57	1.218	165	62
NONPROFIT ORGANIZATIONS	22 18	1 2	2	25 166	101	798 886	81 13	39 21
SELF-EMPLOYEO	6	<u>-</u>		4 2	49 10	925 186	34 16	38 7
NOT EMPLOYED				2	4	38		658 49
STATISTICS	37	36	23	229	376	1.152	70	137
EOUCATIONAL INSTITUTIONS	2	9	2	25	76	376	40	34
FEOERAL GOVERNMENT	26 2	21 1	.11	20	231 44	40	3	1
MILITARY	2	4	2	17	2 5		1	6
INOUSTRY AND BUSINESS	1		3	162	14	651 15	26	14
OTHER	4			3	2	21		2 66
NO REPORT		11			1	5		14
ECONOMICS	477	333	122	234	991	7 • 536	198	820
EOUCATIONAL INSTITUTIONS	154 191	120 157	26 52	47 16	266 514	3 • 372	129	144
OTHER GOVERNMENT	5 2	15	17	3 1	71 17	148	5	7
NONPROFIT ORGANIZATIONS	54 35	21 17	6 20	18 143	38 43	268 3• 424	2 56	10 79
SELF-EMPLOYEO	7 27		1	2 1	10 30	163 132	2	10 11
NOT EMPLOYEO		3		3	2	29	1	510 49
SOCIOLOGY	68	12	13	16	263	1.512	35	171
EOUCATIONAL INSTITUTIONS FEOERAL GOVERNMENT	48	9	8	11	161	1,299	30	61
OTHER GOVERNMENT		3	1 2	1	46 21	54	3	2
NGNPROFIT ORGANIZATIONS	5		1	2	25	92		2
OTHER			1	5	2	45 11	1	2
NOT EMPLOYED	2				5	10	1	97
NO REPORT						1		
EOUCATIONAL INSTITUTIONS	51	2	2	1	87	719	63	166
PEDERAL GOVERNMENT	28 14	2		1	49 21	589	57	28
MILITARY NONPROFIT ORGANIZATIONS			<u>1</u>			<u>5</u>		2
INOUSTRY AND BUSINESS	2 6				7	74 32	1	1
OTHER					1	4 8		
NO REPORT					1	7	1	126 8
OTHER FIELOS	158	403	246	2,074	837	10+621	576	1,419
EOUCATIONAL INSTITUTIONS FEDERAL GOVERNMENT	32 42	71 193	23 59	185 316	261 257	2•735	216	190
OTHER GOVERNMENT	2 5	26	63	18	44	168	18	9
NONPROFIT ORGANIZATIONS	18 53	17 • 95	6 8 72	50 81	98 51	171	16	9
SELF-EMPLOYED	2	* 85 5	72 12	1,397 17	110	7,197 263	305 17	163 8
NOT EMPLOYED	2	2			7	67	4	97 <b>9</b>
THE RELIGIONS	2	1		2	1	20		59

<sup>(1)</sup> OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM HORE THAN : FEDERAL PROGRAM, HENCS THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM OD NOT ADD TO TOTAL.



SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

TABLE A-43.--NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, WORK ACTIVITY, AND PROGRAM, 1964

SCIENTIFIC AND TECHNICAL FIELD AND WORK ACTIVITY		NUMBER		60VERNA	IENTAL PRO	GRAMS	
MOUV WELLATIA	TOTAL	RECEIVING SUPPORT	AGRICUL TURE	ATOMIC ENERGY	DEFENSE	EDUCATION	HEALTH
ALL FIELDS	223,854	97,004(1)	10.957	11.267	29+399	8,679	20,736
RESEARCH AND DEVELOPHENT (A)	77.699	45.703	5,432	6,618	13.709	1.792	11,342
APPLIED RESEARCH	35,781 30,280	25,041 15,728	2 6 9 0 2 6 8 9	4 • 087	4.864	1.233	8×730
MANAGEMENT OR ADMINISTRATION (8)	46,255	21,652	2,728	1 • 723 2 • 340	5 • 905 8 • 708	502 1,482	2.468 3.087
TEACHING	41.209	12+886 13+778	1.335 1.208	1+651 978	6,056 1,647	676	1.995
OTHER	16,582	3,630 9,731	341	608	1.613	.4+512 43	3,754 396
NOT EMPLOYED	9,617		861	530	3,116	657	1.581
CHEMISTRY	63,053	2,510	387	193	606	193	576
RESEARCH AND DEVELOPMENT (A)	27,645	19,305	1.582	3 • 361	5,667	1.280	6+029
BASIC RESEARCH	12,472	11.036 7.452	1,006 667	1.950	2 • 760 1 • 236	383	4.045
MANAGEMENT OR ADMINISTRATION (8) MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	10+607 13+125	2+806 3+343	322 290	555 633	1.132	362 19 120	3,562 446 617
TEACHING	8 • 740 5 • 798	2,448	2 3 3	430	1,280	57	422
PRODUCTION AND INSPECTION	9,485	1.675	112	269 365	232 712	679 17	791 272
NOT EMPLOYED	2,242 3,168	685	33	86	216	45	165
EARTH SCIENCES	1,590	469	42	56	131	36	139
RESEARCH AND DEVELOPMENT (A)	17,907	4+808	226	371	1.232	340	152
BASIC RESEARCH	2+826	1.768	87	169	468	42	52
APPLIED RESEARCH	1,112	627 921	43 44 47	105 64 85	254 208 315	38 4 55	32 20 34
TEACHING	964 2.545	499	32	55	177	32	21
PRODUCTION AND INSPECTION	939	636 160	15 10	23 22	103	198	25
NOT EMPLOYED NO REPORT	7•392 962	1,152	60	67	273	31	6 30
METEOROLOGY	629	171	7	5	44	9	5
RESEARCH AND DEVELOPMENT (A)	5,510	4,814	327	223	2,428	136	203
BASIC RESEARCH	1,043	949 462	51 17	72	382	16	56
APPLIED RESEARCH MANAGEMENT OR ADMINISTRATION (B) MANAGEMENT OR ADMINISTRATION OF	505 1,265	473 1.186	34 107	29 42 83	146 230 680	11 5 46	23 32 72
RESEARCH AND DEVELOPMENT	346	322	14	46	180	8	
PRODUCTION AND INSPECTION	222 68	149 51	7	8	53	31	31 12
OTHER	2,596 140	2.346	151	49	1,246	39	9 44
NO REPORT	176	133	7	9	46	3	10
PHYSICS	26,698	16,718	60	4,371	8.100	1.055	422
RESEARCH AND DEVELOPMENT (A)	14.345	10,772	34	3,071	5,079	248	230
APPLIED RESEARCH	8+040 4+244	6.048 3.201	18 14	2,120	2.144	209	162
RESEARCH AND DEVELOPMENT	4.018	3.017	15	685	1.995	20 107	<b>49</b> 86
TEACHING	3.083 5.368	2,467	13	575	1,658	46	55
DTHEK	221 775	105	3	432 30	528 61	662	74 4
NOT EMPLOYED	1,350	510		89	311	24	18
MATHEMATICS	17,411	288	3	64	126	12	10
RESEARCH AND DEVELOPMENT (A)	5,587	7.818	63	554	4,397	898	358
APPLIED RESEARCH	1.659	3+667 954	27 6	321 93	2+205 368	130	164
ANAGEMENT OR ADMINISTRATION (B)	2,149	1,595	18 19	154 138	1.051	28 116	60 82 96
EACHING	1.916	1.209	12	89	879	58	74
PRODUCTION AND INSPECTION	1.080	488	3 4	21 28	215 349	597 7	54 15
IDT EMPLOYED		554	9	39	350	33	21
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	375	160	1	7	67	15	8

TABLE A-43.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT. BY FIELD. WORK ACTIVITY. AND PROGRAM. 1964—CONTINUED

ALL FIELDS   1.895   0.902   1.295   13,144   104,153   0.134   13,16    RESEACH AND DEVELOPMENT (A)   4.30   2.231   2.29   17,291   4.607   27,442   2.495   2.00    RESEACH AND DEVELOPMENT (A)   2.217   1.011   4.22   2.90   2.200   13,292   1.295   1.595   1.514    RANAGERY OR RESEACH   2.217   1.011   4.22   2.903   2.200   13,292   1.205   1.515   1.514    RANAGERY OR RESEACH   2.217   1.011   4.22   2.903   2.200   13,292   1.200   13,293   1.200   1.200   1.200    RANAGERY OR RESEACH   2.217   1.011   4.22   2.903   2.200   13,293   1.200   1.200    RANAGERY OR RESEACH   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200   2.200									
RESEARCH AND OVELOPMENT (A)  ALL FIELDS  1.835	SCIENTIFIC AND TECHNICAL FIELD AND		GOVERNMENTA	L PROGRA	MS		NO	SHOOD T	
RESEARCH WIN GRYLLDPRENT (A)	WURK ACTIVITY	INTERNATIONAL			SPACE	OTHER		STATUS	REPORT
ARABER MY OR ADMINISTRATION 19			6+822	1,298	13,625	13,144	104,853	6,134	15.863
### APPLIED RESEARCH   180   11130   39   263   31315   17985   1295   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   129   1	RESEARCH AND DEVELOPMENT (A)	431	2,231	237	7,291	4.807	27.443	2.400	2.055
AMAGEMENT ON ADMINISTRATION (8)	APPLIED RESEARCH		1,130	59					1,536
RESEARCH UD AND INSPECTION	MANAGEMENT OR ADMINISTRATION (B)								407
PRODUCT ON AND INSPECTION	MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT		27147	401	3,633	21321	23,000	399	604
TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TO THE TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER TOWER	TEACHING	7							314
WI SERVICE   199   26   2772   255   2162   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   155   15	OTHER	65							1,49
Chemistry   62   189   26   272   545   2,102   155   7,10	NOT EMPLOYED			340		2,426	15,165	862	543
SESANCH AND DEVELOPMENT (A)   129   740   132   2.772   1.013   36,003   2.003   4.55	10 REPORT	)		26		545	1 -	1	
RESEARCH AND GEVELOPMENT (A) 24 333 27 1.461 845 14,050 1,141 51 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1,050 81 1	CHEMISTRY	129	740	132	2,772	1,815	1		
APPLIED RESERVAN  ANALOREMIC TO ADMINISTRATION (B)  ANALOREMIC TO ADMINISTRATION (B)  ANALOREMIC TO ADMINISTRATION (B)  ANALOREMIC TO ADMINISTRATION (B)  ANALOREMIC TO ADMINISTRATION (B)  ARACREMIC TO ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARACOREMIC ADMINISTRATION (C)  ARE COLOREMIC ADMINISTRATION (C	RESEARCH AND DEVELOPMENT (A)	24	303	27	1 (61				
AMAGEMENT OR ADMINISTRATION (8)		13							518 371
MANAGERENT DR. ADRINISTRATION OF RESEARCH AND DEVELOPMENT   37   148   20   607   148   6.122   77   78   78   77   72   78   78	MANAGEMENT OR ADMINISTRATION (B)							346	111
FEACHING	MANAGEMENT OR ADMINISTRATION OF				741	247.	9,501	147	134
MOUNT   10 AND INSPECTION   17   73   55   342   168   74.652   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641   641	TEACHING	• • •	,	20					94
12   42   9   93   130   1,354   150   5   10   REPORT   4   22   4   40   110   716   54   3,16   150   5   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150	PRODUCTION AND INSPECTION	17	73						204 116
EARTH SCIENCES  191 1:0624 336 319 1:0644 11:238 314 1:548  ESSERCH AND DEVELIPMENT (A) 36 6:12 44 1:02 375 914 99 8  ASSIC ASSESSERCH  APPLICO RESEARCH  AND DEVELOPMENT (A) 16 20 390 11 126 290 447 48 00  APPLICO RESEARCH  MANAGEMENT OR ADMINISTRATION (B) 16 220 35 32 85 85 458 11 1  MANAGEMENT OR ADMINISTRATION OF 354 77 66 134 1:0610 16 38  RESEARCH AND DEVELOPMENT 33 104 31 40 73 448 3 1  RESEARCH AND DEVELOPMENT (A) 29 92 8 25 212 1:702 89 11 1  THERE - 8 45 43 9 225 750 17 1 1  THERE - 8 45 43 9 225 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 43 9 25 750 17 1 1  THERE - 8 45 45 45 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NOT EMPLOYED		42	9	93	130	1,354		53
SESEARCH AND DEVELOPMENT (A)		4	22	4	48	110	718	54	3,168 349
SASIC RESEARCH		191	1,624	336	319	1+064	11,238	314	1,547
APPLIED RESEARCH ANAGEMENT OR ADMINISTRATION (8)  15 220 35 35 85 458 11 11 ANAGEMENT OR ADMINISTRATION OF  RESEARCH AND OVELEDPMENT (1) ANAGEMENT OR ADMINISTRATION OF  RESEARCH AND OVELEDPMENT (2) ANAGEMENT OR ADMINISTRATION OF  RESEARCH AND OVELEDPMENT (3) ANAGEMENT OR ADMINISTRATION OF  RESEARCH AND OVELEDPMENT (4)  RESEARCH AND OVELEDPMENT (5) ANAGEMENT OR ADMINISTRATION OF  RESEARCH AND OVELEDPMENT (7) ANAGEMENT OR ADMINISTRATION OF  RESEARCH AND OVELEDPMENT (8) ANAGEMENT OR ADMINISTRATION OF  RESEARCH AND OVELEDPMENT (9) ANAGEMENT OR ADMINISTRATION OF  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AND OVELEDPMENT (1)  RESEARCH AN	BASIC RESEARCH				162	375	914	59	85
MANAGERENT OR ADMINISTRATION (8)	APPLIED RESEARCH		,						69
RESEARCH AND GEVELOPMENT   33   194   31   40   73   148   3   1   1   1   1   1   1   1   1   1	MANAGEMENT OR ADMINISTRATION (B)								16
RECHING   29   92   8   25   21   1702   30   11	RESEARCH AND DEVELOPMENT	33	194	31	40				
THER		29	92	:				_	14 118
OT EMPLOYED  METEOROLOGY  143  214  105  65  37  5  10  74  241  13  20  METEOROLOGY  143  214  105  656  1,585  440  455  21  ESEARCH AND DEVELOPMENT (A)  26  51  52  33  34  32  34  34  34  34  36  36  370  36  370  370  370  370  3	)THER				- 1			17	12
#ETEOROLOGY	IOT EMPLOYED			i				120	129 962
SESARCH AND DEVELOPMENT (A)	METEOROLOGY								204
8ASIC RESEARCH	ESEARCH AND DEVELOPMENT (A)			<del>:</del>	_			45	211
AMAGEMENT OR ADMINISTRATION (8) - 63 70 40 185 347 74 1  MANAGEMENT OR ADMINISTRATION OF  MESCARCH AND OEVELOPMENT - 17 21 5 109 56  RESTARCH AND OEVELOPMENT (A) - 22 8 3 22 59 20 3 2  PHYSICS - 113 112 44 4,607 1,762 6,838 648 2,49  ESEARCH AND OEVELOPMENT (A) - 33 59 18 3,009 1,137 2,636 346 59  APPLIEO RESCARCH 10 22 6 1,136 131 917 77 4  MANAGEMENT OR ADMINISTRATION (B) - 10 22 6 1,136 131 917 77 4  MANAGEMENT OR ADMINISTRATION (B) - 52 33 15 1,074 171 924 20 5  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 28 10 915 134 567 13 23  RESTARCH AND DEVELOPMENT - 43 3 2 88 52 96 16 22 25  RESTARCH AND DEVELOPMENT - 4 3 15 5 99 15  RESTARCH AND DEVELOPMENT - 50 157 10 41 41 41 41 41 41 41 41 41 41 41 41 41	BASIC RESEARCH	14	,	_					34
MANAGERENT OR ADMINISTRATION OF RESEARCH AND OEVELOPMENT (A)  ABASIC RESEARCH AND OEVELOPMENT (A)  ANAGEMENT OR ADMINISTRATION (B)  APPLIED RESEARCH AND OEVELOPMENT (A)  BASIC RESEARCH AND OEVELOPMENT (A)  CREPORT  APPLIED RESEARCH AND OEVELOPMENT (B)  ANAGEMENT OR ADMINISTRATION (C)  CREPORT  APPLIED RESEARCH AND OEVELOPMENT (B)  ANAGEMENT OR ADMINISTRATION (C)  CREPORT  APPLIED RESEARCH AND OEVELOPMENT (B)  ANAGEMENT OR ADMINISTRATION (C)  CREPORT  APPLIED RESEARCH AND OEVELOPMENT (B)  APPLIED RESEARCH AND OEVELOPMENT (C)  ANAGEMENT OR ADMINISTRATION (C)  CREPORT  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  CRECKER (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  CRECKER (C)  ANAGEMENT OR ADMINISTRATION (C)  CRECKER (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION (C)  ANAGEMENT OR ADMINISTRATION		1		-	102	102	21	- :	2
EACHING - 3 7 1 22 41 60 7 7	MANAGEMENT OR ADMINISTRATION OF		1			347	74	1	4
THER	EACHING			_				7	3
14   14   15   17   16   17   17   18   18   19   19   19   19   19   19	THER		- 1	3	4	20			6
2   8   3   22   59   20   3   22	OT EMPLOYED			i		909			7
ESEARCH AND DEVELOPMENT (A)		2	. 8	3	22	59			50
BASIC RESEARCH		113	112	44	4,607	1,762	6+838	648	2+494
APPLIEO RESEARCH	BASIC RESEARCH			_ 1				346	591
ARABERENT DR ADMINISTRATION (B) - 52 33 15 1,074 171 924 20 55 RESEARCH AND DEVELOPMENT 43 28 10 915 134 567 13 36 10 10 REPORT	APPLIED RESEARCH			7 1					515
RESEARCH AND DEVELOPMENT		52		-					57
THER	RESEARCH AND DEVELOPMENT	43	28	10	915	134	547	,,	24
THER		16		3	244	357			254
Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Contended   Cont	THER	8				-			. 2
MATHEMATICS			1.3						1.350
ESEARCH AND DEVELOPMENT (A)					88	52	96	16	221
BASIC RESE 'RCH						1,108	7+874	535	1.184
APPLIED RESCARCH	BASIC RESE'RCH								233
MANAGEMENT OR ADMINISTRATION OF  RESEARCH AND DEVELOPMENT		13	17	16	517				181 42
ACHING	MANAGEMENT OR ADMINISTRATION OF	26	21	26	515	138	1+633		52
NODUCTION AND INSPECTION	RESEARCH AND DEVELOPMENT			-			670	12	25
THER	RODUCTION AND INSPECTION	- (			1		3 • 379	228	201
D REPORT		10	8	- 1					13 38
	D REPORT	3	5	<u>-</u>	27				562 85

TABLE A-43.—NUMBER OF SCIENTISTS RECEIVING FEOERAL SUPPORT, BY FIELD, WORK ACTIVITY, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND				GOVERNM	IENTAL PRE	IGRAMS	
WORK ACTIVITY	TOTAL	NUMBER RECEIVING SUPPORT	AGRICULTURE	ATONIC ENERGY	DEFENSE	EDUCATION	HEALTH
AGRICULTURAL SCIENCES	9,526	6,406	3,701	93	147	157	137
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	2,729	2.040	1,447	51	28	23	77
APPLIED RESEARCH	1,812	685 1+307	457 973	3B 13	10 15	7 15	49 28
MANAGEMENT OR ADMINISTRATION (B)	4,287	2+940	1.278	32	73	46	36
RESEARCH AND DEVELOPMENT	1,136	801 534	413 415	25 8	26	23	21
PRODUCTION AND INSPECTION	257 835	133 521	90	<b></b>	12 8		14
NOT EMPLOYEO	160	238	323	2	19 	22	5
BIOLOGICAL SCIENCES	27,135	16,123	3.247	957	7	5	4
RESEARCH AND DEVELOPMENT (A)	10,980	8,505	2+038		1+122	1,371	9,116
BASIC RESEARCH	7,368 3,531	6.121	1,297	568 467	531 326	266 22 <b>2</b>	5,057 3,823
MANAGEMENT OR ADMINISTRATION (B)	4,110	2+355	738 505	97 172	198 342	42 198	1,221 1,228
TEACHING	2.492 7.785	1.611 3.541	349 365	109 145	256 101	100 803	844 1,946
OTHER	348 2.087	147 912	75 143	13 33	15 89	2 51	36 510
NO REPORT	839 986	584	121	26		51	339
PSYCHOLOGY	16.804	6+397	44	56	1.178	1,666	2.899
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	4,108	2,302	6	26	559	466	1,167
APPLIED RESEARCH	1,397 2,595	1,106 1,105	1 5	12 14	170 326	172 287	769 389
MANAGEMENT OR ADMINISTRATION (B)	2.849	1.376	21	18	389	400	486
RESEARCH AND DEVELOPMENT	1.079 3.670	736 1,132	11 14	10 7	278 102	170 450	269 542
OTHER	5,148	1,498	1 2	4	110	321	672
NO REPORT	658 360	87		1	17	29	32
STATISTICS	2,843	1 - 484	95	81	578	88	276
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	854 170	564 116	24	24	225	18	134
APPLIED RESEARCH	552 694	364	5 17	14	149	10	34 80
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	346	389	40	16	146	24	74
TEACHING	484	20B 162	21	14	79 52	15 37	52 31
OTHER	374 289	183 150	12	19 17	85 58	3	13 23
NO REPORT	66 82	36	2	2	12	2	
ECONOMICS	12,143	3 • 589	1,275	115	557	255	141
RESEARCH AND DEVELOPMENT (A)	1 v 927 584	1,157	583	6	107	37	35
APPLIED RESEARCH	1,296	329 818	137 446	2 4	30 72	16 19	11 23
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	3 • 534	1.151	298	80	284	92	68
TEACHING	1,288	624 596	182 219	37	142	47 90	40 18
OTHER	1,215	164 397	24 102	20	58 43	4 24	9 7
NO REPORT	510 397	124	49	<u>1</u>	19		 4
. SOCIOTOGA	2,703	985	114	3	65	226	447
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	593	377	53 -		25	80	179
APPLIED RESEARCH	380 209	231 143	31		14	52 28	120 59
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	440	226	26	2	15	54	107
TEACHING	1.406	161 316	16 29 -	2	11 15	37 82	82 142
OTHER	9 92	6 40	3		2	7	1
NO REPORT	97 66	20	i		3	-	10
E						3	8

TABLE A-43.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, WORK ACTIVITY, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND		GOVERNMENTA	L PROGRA	MS	·			
WDRK ACTIVITY	INTERNATIONAL	NATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER	NO SUPPORT	SUPPORT STATUS UNKNOWN	NO REPORT
AGRICULTURAL SCIENCES	76	2,500	155	11	476	2,642	157	321
RESEARCH AND DEVELOPMENT (A)	18  16	493 163 305	21	3 1	112 46	592 123	66 26	3 <u>1</u> 13
MANAGEMENT OR ADMINISTRATION (B)	37 26	1+618	16 93	5	63 261	450 1,269	37 32	18 46
TEACHING	7 	82 48 192	13 3 11 23	3 1	90 25 6	302 296 116	13 32 4	20 31 4
NOT EMPLOYED	3	67	4	1	30	282  87	<del></del>	16 160 33
BIOLOGICAL SCIENCES	195	751	31	450	1,619	8+756	529	1.727
RESEARCH AND DEVELOPMENT (A)	57 36 21 79	360 245 112 185	4 2 1 18	236 159 75 128	655 532 122 243	1.942 847 1.044 1.572	234 169 65 25	299 231 67 79
RESEARCH AND DEVELOPMENT	43 34 4	111 138 4	9 3 2	106 48 1	141 518 9	825 3,747 185	10 191 10	46 306 6
NOT EMPLOYED NO REPORT	<u></u> 11	<u>-</u> 27	3 1	23  14	126	253	54  15	64 839 134
PSYCHOLOGY	126	19	21	323	1,161	8,622	661	1,124
RESEARCH AND DEVELOPMENT (A)	35 16 18 53	6 5 1 9	9 1 8 8	156 53 87 113	288 132 151 232	1,497 215 1,259 1,387	204 24 179 39	105 52 52 47
RESEARCH AND DEVELOPMENT TEACHING	38 17		4	88 23	96 151	322 2•337	100	12 101
OTHER	20  1	4	3	26 4	479	3,218 	309	123 658
STATISTICS	37	36	23	229	376	1,152	70	90 137
RESEARCH AND DEVELOPMENT (A)	8	14	10	95 7	128 32	241 31	30	19
MANAGEMENT OR ADMINISTRATION (8)	21 12	9 10 8	9 5 4	77 59 34	78 121 57	165 287 131	18	5 12
TEACHING	1 3 2	2 6 4	6 2	11 ,4 26	42 39 30	288 182 127	2 21 7 5	5 13 2 7
NO REPORT	2			4	16	27	1	66 18
ECONOMICS	477	333	122	234	991	7,536	198	820
RESEARCH AND DEVELOPMENT (A	128 43 84 169	113 24 88 114	28 7 21 58	21 4 17 130	298 107 189 319	680 221 426 2•306	48 15 32 24	42 19 20 53
RESEARCH AND DEVELOPMENT	95 73 20 74	64 42 13 40	31 10 6 18	79 19 37 21	195 139 42 159	643 2.709 1.016 642	6 77 22 24	15 87 13
NOT EMPLOYED	13	11	2	6	34	183	3	28 510 87
SOCIOLOGY	68	12	13	16	263	1,512	35	171
RESEARCH AND DEVELOPMENT (A)	19 16 3 19	7 3 4 4	5 3 2 2	5 3 2 4	87 54 31 67	191 129 61 198	6 5 1 8	19 15 4 8
RESEARCH AND DEVELOPMENT	10 24	2 1	5	3 5 1	53 81	75 1,039	3 18	8 33
OTHER	4		1	i	17	3 46	2	4

TABLE A-43.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD. WORK ACTIVITY, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND		NUMBER		GOVERNM	IENTAL PRO	GRAMS	
WORK ACTIVITY	TOTAL	RECEIVING SUPPORT	AGR I CULTURE	ATDMIC ENERGY	DEFENSE	EDUCATION	HEALTH
LINGUISTICS	1.351	403	3	4	92	194	39
RESEARCH AND DEVELOPMENT (A)	214	96		1	32	28	18
BASIC RESEARCH	132	52			19	15	14
APPLIED RESEARCH	77	41			12	1 13	-4
MANAGEMENT OR ADMINISTRATION (8)		98	2	1	24	52	Ÿ
RESEARCH AND DEVELOPMENT	64	42	1	1	14	24	6
TEACHING	695	168	1	i	23	99	10
PRODUCTION AND INSPECTION		1					
OTHER	81	24		1	9	و ا	,
NOT EMPLOYED	126						
NO REPORT	60	16			4	6	3
OTHER FIELOS	20,770	8,154	220	1.078	3.836	1.013	517
RESEARCH AND DEVELOPMENT (A)	4,848	2,470	76	359	1.308	55	128
BASIC RESEARCH	517	353	20	45	103	29	71
APPLIED RESEARCH	1,591	893	47	125	463	15	35
MANAGEMENT OR ADMINISTRATION (5)	5.704	2.837	80	395	1,618	172	176
RESEARCH AND DEVELOPMENT	2.867	1.758	38	350		۔۔ ا	
TEACHING	3.851	1.206	36 31	258 58	1,076	59	78
PRODUCTION AND INSPECTION	2,571	515		1	165	723	95
OTHER	2.333	942	6 23	109	272	2	30
NOT EMPLOYED	979	942		135	387	47	75
NO REPORT	484	184	4	22	86	1,	
	707	104		22	80	14	13

TABLE A-43.—NUMBER OF SCIENTISTS RECEIVING FEDERAL SUPPORT, BY FIELD, WORK ACTIVITY, AND PROGRAM, 1964—CONTINUED

SCIENTIFIC AND TECHNICAL FIELD AND		GOVERNMENTA	L PROGRA	MS		ND	SUPPORT	
WORK ACTIVITY	INTERNATIONAL	MATURAL RESOURCES	PUBLIC WORKS	SPACE	OTHER	SUPPORT	STATUS	NO REPORT
LINGUISTICS	51	2	2	1	87	719	63	166
RESEARCH AND DEVELOPMENT (A)	5 1 4 16				23 10 12 22	64 26	14 6 8 2	12 10 2 3
RESEARCH AND DEVELOPMENT	23	2	1 1	1	7 34 5	21 477 3 49	40	10
OTHER FIELDS	158				3	30	3	126 11
	158	403	246	2,074	837	10,621	576	1,419
RESEARCH AND DEVELOPMENT (A)	74	106 27 49 153	36 5 14 102	809 72 272 833	168 60 64 225	2,177 129 643 2,741	134 20 36 54	67 15 19 72
RESEARCH AND DEVELOPMENT	36 19 7 33	80 33 26 76	27 14 32 58	618 58 138 198	109 194 - 31 178	1,056 2,329 1,924 1,250	18 184 106 90	35 132 26 51
NO REPORT	7	9	4	38	41	200	8	979 92

<sup>(?)</sup>OF THIS NUMBER, 20,758 SCIENTISTS REPORTED SUPPORT FROM MORE THAN 1 FEDERAL PROGRAM, HENCE THE COLUMNS GIVING NUMBER OF SCIENTISTS BY PROGRAM DO NOT ADD TO TOTAL.

<sup>(</sup>A) INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

TABLE A-44.-NUMBER OF SCIENTISTS, FULL-TIME PROFESSIONALLY EMPLOYED, PART-TIME STUDENTS, BY FIELD AND HIGHEST DEGREE, 1964

		<u> </u>	H I GHE ST		LESS THAN	NO REPORT	
SCIENTIFIC AND TECHNICAL FIELD	TOTAL	PH.D.	PROFESSIONAL MEDICAL	MASTER'S	BACHELCR * S	BACHELOR'S	OF DEGREE
ALL FIELDS	9,551	223	75	4,390	4,556	183	104
HEMISTRY	2,143	46	9	578	1,440	40	30
ARTH SCIENCES	482	16		255	203	7	1
ETEOROLOGY	288	3		72	131	69	13
HYSICS	1,838	17	1	767	1,031	15	7
ATHEMATICS	1,174	19		648	456	26	25
GRICULTURAL SCIENCES	169	3		103	62		1
IOLOGICAL SCIENCES	732	34	81	333	279	3	2
SYCHOLOGY	683	42	2	602	36		1
TATISTICS	178	4	1	102	62	3	6
CONOMICS	508	16		373	112	3	4
OCIOLOGY	52	5		42	5		
INGUISTICS	81	6		49	23		3
THER FIELDS	1,223	12	1	466	716	17	11

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

#### TABLE A-45.-NUMBER OF SCIENTISTS, FULL-TIME PROFESSIONALLY EMPLOYED, PART-TIME STUDENTS, BY FIELD AND TYPE OF EMPLOYER, 1964

				1	TYPE OF E	MPLOYER							
SCIENTIFIC AND TECHNICAL FIELD	TOTAL	EDUCA- TIONAL INSTI- TUTIONS	PENT			NONPROFIT ORGANIZA- TIONS	INDUSTRY AND BUSINESS	SELF-			EMPLOYED	EMPLOYED	NO REPORT OF TYPE OF EMPLOYER
ALL FIELDS	9•551	3,108	1,293	336	300	470	3,915	51	58		20		
HEMISTRY	2,143	312	202	5ა	20	83	1,449	6	13		2		
ARTH SCIENCES	482	186	92	36	12	14	131	6	3		2		
ETEOROLOGY	288	29	94	1	128	11	25						
HYSICS	1,838	510	414	4	41 13	75 59	791 569	1			1		
ATHEMATICS	1,174 169	423 99	91 41	21	13	39	209		7				
GRICULTURAL SCIENCES IOLOGICAL SCIENCES	732	462	87	36	23	52	55	4	8		5		
SYCHOLOGY	683	306	50	131	16	95	51	20	9		ĺŚ		
TATISTICS	178	44	36	4	2	l ii	80		1				
CONOMICS	508	247	72	19	7	24	123	4	12				
DCIOLOGY	52	36	5	2		5	3		1				
INGUISTICS	81	55	6		1	11	6	1	1	ļ			
THER FIELDS	1,223	399	103	17	36	30	626	, 7	4		1		

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

# TABLE A-46 .-- NUMBER OF SCIENTISTS, FULL-TIME PROFESSIONALLY EMPLOYED, PART-TIME STUDENTS, BY FIELD AND WORK ACTIVITY, 1964

					WCRK AC	YIVITY					
SCIENTIFIC AND TECHNICAL FIELD	TOTAL	RESEAR	CH AND DEV	ELOPMENT	MANAGEN Adminis	ENT OR TRATION	TEACHING	PRODUCTION AND	CTHER	NOT EMPLOYED	REPORT OF WORK
		TOTAL (A)	BASIC RESEARCH	APPLIED RESEARCH	TOTAL (B)	OF R+D	TEACHING	INSPECTION	CINEK	<u> </u>	ACTIVITY
ALL FIELDS	9,551	4,774	1,426	2,231	853	472	1,919	812	1,035		158
CHEMISTRY	2,143 482	1,315	427 112	573 57	150 31	109 14	135 104	438 25	73 137		32 15 13
METEOROLOGY	288 1,838 1,174	95 1,287 521	45 411 75	4 <i>5,</i> 5 ú 3 2 5 5	29 130 108	94 66	342 324	20 107	141 41 55		18
AGRICULTURAL SCIENCES BIOLOGICAL SCIENCES PSYCHOLOGY	169 732 683	38 320 231	39 195 28	49 120 195	31 32 85	17 13 27	28 296 80	21 	14 48 279		15 8
STAT	179 508	79 143	10 34	59 107	26 67	15 21	26 182	25 44	18 61		11
SCCIOLOGY	52 81 1,223	14 19 492	11 32	7 8 170	10 10 144	6 3 79	21 46 327	126	12C		1 14

(A)INCLUDES DEVELOPMENT OR DESIGN, NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

TABLE A-47.-FIRST AND SECOND HORK ACTIVITY OF SCIENTIST EMPLOYED AT UNIVERSITIES AND COLLEGES, 84 FIELD, 1904

		ļ		SEC	ONO WORK	CACTIVI			—-·—-		<u> </u>
SCIENTIFIC AND TECHNICAL FIELD	TOTAL	RESEAS	RCH AND DEV				 T	Γ	Ι		NO
AND FIRST WORK ACTIVITY			T	T	MANAGE N AOMINIS	TRATION	! TEACHING	PRODUCTION AND		NOT EMPLOYEO	REPORT OF WORK
		TOTAL (A)	RESEARCH	APPLIED RESEARCH	TOTAL (8)	OF R≎Đ	TENOTINO	INSPECTION	OTHER		ACTIVITY
ALL FIELOS	69,762	26,959	18,008	7•773	5,151	2,010	15,644	348	7,798		13,862
RESEARCH AND OEVELOPMENT (A) BASIC RESEARCH	25,726 19,879	5,224 3,154	1,449	2,877 2,580	1,205 762	1,077	12,099	193 59	2,533		4,472 4.068
MANAGEMENT OR ADMINISTRATION (8) — - HANAGEMENT OR ADMINISTRATION	5,399 5,299	1,793	703	122 080	381 364	336 213	2+083 2+48&	109 52	655 485		378 412
OF RESEARCH AND DEVELOPMENT TEACHING PRODUCTION AND INSPECTION	2,725 33,951	1,161	516 15,389	551 3,760	151 3,411	679	1.007	24 71	190 4,537		192 6•666
OTHER NOT EMPLOYED	245	125 844	36 431	60 396	28 143	9 32	19 1•040	14 18	23 220		36 375
NO REPORT	1,901							→ →			1,901
CHEMISTRY	13,052	4,618	3,511	960	684	273	3,284	144	1.302		3,020
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	6,520 5,906	911 658	184	615 537	195 161	178 148	2,886 2,744	99	818 751		1,611
APPLIED RESEARCH	567 588	220 191	171 125	8 56	32 33	28 20	141 252	52 17	65 41		1 <b>• 5</b> 54 57 5 <del>4</del>
OF RESEARCH AND DEVELOPMENT -	324	152	97	47	13		101	5	28		25
PRODUCTION AND INSPECTION OTHER	5•151 108 350	3,312 68 136	3,059 24 119	241 33 15	445 5	68	7	17 9	435 2		942 17
NOT EMPLOYED	335				6	3	139	2			61
EARTH SCIENCES	3,730	1,529	1,233	288	232	63.	560	20	65s		335
RESEARCH AND DEVELOPMENT (A) 8ASIC RESEARCH	916	168	37	124	48	41	367	7	199		733 127
APPLIED RESEARCH	763 150	124	37	122	38 10	33 8	326 40	3 4	155		117 10
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT -	207 101	52 37	42 28	10	12	'	99	2	28		14
PRODUCTION AND INSPECTION	2,224	1,229	1,092	137	167	31		2	11 395		11 427
NOT EMPLOYED	270	78	60	17	5	4	93	1 4	30		2 60
NO REPORT	103							<b>7</b>			103
METEOROLOGY	497	198	109	80	43	35	100	6	69		81
BASIC RESEARCH	275 204 68	74   58   12	13	53 51	25 21	24 20	81 62	5 1	48 29		43 33
MANAGEMENT OR ADMINISTRATION (8) MANAGEMENT OR ADMINISTRATION	32	12	11	1	2	2	19	4	19		10 2
OF RESEARCH AND DEVELOPMENT - TEACHING	22 137	11 91	10 73	18	15	8	8		2		1
PRODUCTION AND INSPECTION	35	21	12	8			6	1	13		1.3
NOT EMPLOYED	17										17
PHYSICS	10,672	4,022	2,426	908	781	358	2,044	10	587		3,228
RESEARCH AND DEVELOPMENT (A) 8ASIC RESEARCH	5•376 4•606	1,467	240	637 549	298	277	1,805	7	224		1,575
APPLIED RESEARCH MANAGEMENT OR ACMINISTRATION (B)	547 529	337 231	171 103	85	201 63 36	188 62 19	1•724 72 202	6	26		1•515 48
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT -	340	204	87	78	17		82		2C		40
PRODUCTION AND INSPECTION	4,362	2,273	2,042	180 1	441	59		3	341		23 1•304 1
NOT EMPLOYED	291	48		5	· <sup>5</sup> .	3	37		2		17
MATHEMATICS	6,296	2,260	1,732	427	512						291
RESEARCH AND DEVELOPMENT (A)	1,534	253	73	131	512	94	929	43	653		1,567
BASIC RESEARCH	1,147 315	111	70	103	17 28	10	834	21 2 9	101 43 48		177 140
MANAGEMENT OR ADMINISTRATION (8) MANAGEMENT OR ADMINISTRATION OF RESEARCH AND OFFICE POMENT	405	112	48	49	21	12	210	11	•		30 30
OF RESEARCH AND DEVELOPMENT TEACHING	200 3,980	1,833	35 1,584	40 234	9 - 424	35	74	7	13 519		12 1 <b>: 1</b> 98
OTHER NOT EMPLOYED	45 199	20 42	2 25	14	7 7	2	120	3 2			5 24
401 EAFCOTED							<del></del>				

	SECONO WORK ACTIVITY									·	i
SCIENTIFIC AND TECHNICAL FIELD AND FIRST WORK ACTIVITY	TOTAL	RESEA	ARCH AND D			EMENT OR	7	T	<del></del>	1	NO
THE PROPERTY AND ADDRESS OF		TOTAL	<del></del>	<del></del>	INIMON	STRATION	TEACHING	PRODUCTION AND	1 (	NOT EMPLCYED	REPORT OF WOPK
		(A)	BASIC	APPLIED H RESEARCH		OF 9+0		INSPECTION	OTHER		ACTIVITY
AGRICULTURAL SCIENCES	2,769	1,189	516	665	243	128	697	22	214		
RESFARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH	1,295	184		iai	88		523	8	99		77
MANAGEMENT OR ACMINISTRATION (B)	397		1 2.0		72 45	65	330	5 6	32 67 19		24 53
OF RESCARCH AND DEVELOPMENT PRODUCTION AND INSPECTION	275 801 20	484	151	95 331	29 101		89	1 4	11		35 21
OTHER	140	54	•	5 36	5		4 22	4	82 2 12		130 3 43
810LOGICAL SCIENCES	14,171	5,930									116
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	6,252	1,217	4,30a 393	792	930	239	4,227	26	991		2,067
MANAGEMENT OR ACMINISTRATION (B)	1,498 1,062	757 455 327	390 192	737 53	196	174	3,546 2,806 739	18 5 13	558 431 127		642 552
OF RESEARCH AND DEVELOPMENT - TEACHING	635	236	130	132	35	39	526 286	4	48		90 83
PRODUCTION AND INSPECTION OTHER NOT EMPLOYED	19 431	4,201 8 177	3,631 4 88	568 2 88	567 6 12	160	1	4	369 2		55 780 2
NO REPORT	486						154		14		74
PSYCHOLOGY  RESEARCH AND DEVELOPMENT (A)	6,532	2,446	1,312	1,068	566	234	1,430		1,550		486 540
APPLIED RESEARCH	1,434 915 506	262 133 122	56  54	164 103 56	113 65	100 62	768 572	4	7171		59 41
MANAGEMENT OR ACMINISTRATION (B) MANAGEMENT OR ADMINISTRATION OF RESFARCH AND DEVELOPMENT	808 289	195	61	124	46	37	195 339		126		41 17 42
PRODUCTION AND INSPECTION	3,444	1,792	1,168	82 611	331	94	† e7				9 307
NOT EMPLOYED	747 	197	21	169	82	7	323		112		33
STATISTICS	769	346	165	164	43	23	144				99
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH	179	41 16	12	18 15	7 2		92	3	25 -		113
MANAGEMENT OR ADMINISTRATION (A) -	89 76	2 <i>2</i> 16	12	12	5	4 2	54 37 39	3 2	16 -		5 6
OF RESEARCH AND DEVELOPMENT - TEACHING PRODUCTIO + AND INSPECTION	45 456 5	14 277	148	11 125	32	14 -	21	2	6 -		1
OTHER	30	3 9	3	6	1		13	1	75  -   - 2  -		67 1 5
ECONUMICS	5,023	2,031	1,116								23
RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH	844	107	62	913	26	21	867 544	32			882
APPLIED RESEARCH	367 477 512	45 62 78	62	45 	13 13 55	11	250 294	8	35 70		54 24 30
TEACHING	187 3,387	53	19	34	23	32	278 76	5 2	39 -		57
OTHER NOT EMPLOYED	12 123 <sub> </sub>	5 - 18	15	794	366 2	75	45	17	592		17 609 1
NU REPORT		i							- 1		16  145
RESEARCH A 10 DEVELOPMENT (A)	2,065	896	654	241	251	84	425	1	204		288
APPLIFU RESEARCH	305 103	26 - 13	13	26 26	38 23 15	34 2? 12	276 217 -		24		19
PROPERTY OF TRANSPORMENT OF RESEARCH AND DEVELOPMENT	110	39	21	19	13	3	135 -	<u>1</u>	771		13
PROBLECTION AND INSPECTION	1,372	810	614	ı					7 158		5 207
NO REPORT	47		6	1	3	2	14 -		1		2
Manager 1											47

TABLE A-47. -FIRST AND SECOND WORK ACTIVITY OF SCIENTISTS EMPLOYED AT ULIVEPSITIES AND COLLEGES, BY FIELD, 1964--CONTINUED

				SEC	CND WORK	ACTIVE	ſΥ						
SCIENTIFIC AND TECHNICAL FIELD AND FIRST WORK ACTIVITY	TOTAL	RESEAR	C4 VND DEA	ELOPMENT	MANAGEMENT OR ADMINISTRATION		ADMINISTRATION			PRUDUCTION		NOT EMPLOYED	
		TOTAL.	BASIC RESEARCH	APPLIEO RESEARCH	LATOT (3)	OF R+D	TEACHING	AND INSPECTION	OTHER		ACTIVITY		
LINGUISTICS	892	347	263	84	84	20	153		189		119		
RESEARCH AND DEVELOPMENT (A)	110 87 22 88	10 5 4 11	3 3 6	7 3 1 5	2 1 1 2	1 1 1	73 04 9 64		20 13 7 7		5 4 1 4		
OF RESEARCH AND DEVELOPMENT FACHING	33 631 	325	5 253  1	70 	1 78 2	16	16		161		1 69 7 		
OTHER ! IELCS	3,294	1,147	663	383	320	106	452	33	513		820		
RESEARCH AND OEVELOPMENT (4) BASIC RESEARCH	582 295 217 385	175 64 79 92	53  43 26	80 56 2 33	41 4 18 28	35 8 18 22	209 144 60 181	16 1 9 5	69 33 29 47		72 44 22 32		
OF RESEARCH AND DEVELOPMENT - TEACHING	164 2,085 20 150	73 838 8 34	18 566 	29 255 3 12	247 2 11	46	47 4 28	5 9 1 2	22 383 1 13		11 608 4 32		
NO REPORT	72										72		

(A)INCLUDES DEVELOPMENT OR DESIGN NOT SEPARATELY IDENTIFIED.
(B)INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SQUECE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

## HIGGEST OCONER AND PERSONNELL PROPERTIONS AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSONNELL PROPERTY AND PERSO					SEC	OND WORK	ACT1#11	Υ				NO
### NOTAL DASIGN PRISONER   DOTAL OF A-0   LASPECTION   ### LL DEGREES		TGTAL	RESEAR	CH AND DEV	ELOPMENT	1 -		TEACHING		CTUED		KSPGRT OF WORK ACTIVITY
RESEARCH TWO DEVELOPMENT (11)							CF R+0	TEACHING		UINCE.		
### ### ### ### ### ### ### ### ### ##	ALL DEGREES	69,762	26, 959	18,009	7,773	5,151	2,010	15,644	348	7,798		13,862
MAINTEGERT ON ADMINISTRATION 107-205 1163 550 551 151	BASIC RESEARCH	19,879 5,399	3,154 1,793	1,347	2,580 122	762 381	693 336	9,990 2,033	59 109	1,846 655		4,472 4,068 378
RESIDENT FILE AND INSPECTION   245   125   36   60   28   9   19   14   22   3   3   3   3   3   3   3   3	MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	2,725	1,161	516	551	151		1,007	24	190		192
90 ACPORT   1,701	PRODUCTÍO: ANO INSPECTION OTHER	245	125 844	36 431	60	28	9	19 1,040	14 18	23 220		36 375
RESEAUCH NO DEVELOPMENT (A)	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	1,701		Į.				i				1.901
## BASIC ACSERACE - 11.0°; 1;230 - 1.005 560 517 6:790 7 685 1:55 ## APPLITA RESEARCH STUDY (10 2.519 57) 625 49 197 178 1;230 7 202 9 9 ## APPLITA RESEARCH STUDY (10 2.519 57) 555 406 285 170 1:797 8 308 28 ## APPLITA RESEARCH AND DEVELOPMENT   1,727 760 397 331 115 - 812 3 112 12 12 ## TEACHIST - 1.00 115 12:12 2.450 2:455 528 - 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PH.D. OEGREE	41,539	17,992			<del> </del> -				<del></del>		5,372
OF SECRACH AND DEVELOPMENT 1. 1,727 760 397 331 115	BASIC RESEARCH	11,0/3 2,518	1 • 230 757	635	1,065 49	560 197	517 178	6,990 1,237	7 21	685 202		1,634 1,536 94 282
### PADE   VEO   796   797   386   591   183   121   1,246   2   245   32    ### RESPACE   VEO OF EXECUTED   797   386   591   183   121   1,246   2   245   32    ### RESPACE   VEO OF EXECUTED   797   386   591   183   121   1,246   2   245   32    ### RESPACE   VEO OF EXECUTED   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   798   7	OF RESEARCH AND OEVELOPMENT TEACHING	22+186	14,705 10	12,212	2,450 7	2,458	2	11	18	2,630 2		125 2,375 1
RESEARCH AND DEVELOPMENT (A) - 1,565 2/0 66 177 62 55 1,022 - 139 10 RSGET RESEARCH 932 136 - 134 34 30 588 - 86 77 28 77 28 78 78 78 78 78 78 78 78 78 78 78 78 78	NUT EMPL _YEO					77 	13 		1	86		996
BASIC MESFARCH	PROFESSIONAL IFOICAL OEGREE	2,578	979	386	591	183	121	1,246	2	245		323
MANAGERICH GRAPMINSTRATION   175   59   15   44   9   93   7   7	BASIC RESEARCH	932 630	136 102	65	134 37	34 28	30 23	598 423		86 53		102 78 24
PRODUCTION AND INSPECTION - 20	MANAGEMENT OR ADMINISTRATION OF RESFARCH AND DEVELOPMENT	175	59	15	44	9		93		   7		7 44
NU REPORT - 146 - 17.011 5.377 2.822 2.079 1.093 300 2.299 140 2.588 - 518  RESEARCH AND DEVELOPMENT (A) - 5,760 1.784 468 954 226 193 11.619 73 840 - 1.74  BASIC AFSEARCH 1,732 601 433 25 99 85 344 41 276 16.24  APPLIED RESEARCH AND OVELOPMENT - 1,732 601 433 25 99 85 344 41 276 16.24  MANAGEMENT OR ADMINISTRATION (B) - 825 269 85 145 32 18 304 21 111 - 8  MANAGEMENT OR ADMINISTRATION (B) - 8736 2.988 2.106 824 775 87 38 1.536 3.39  PRODUCTION AND INSPECTION - 90 45 115 2 133 47 10 372 4 86 - 14  MOT EMPLOYED	PRODUCTION AND INSPECTION OTHER	2	2	2				82				18
RESEARCH AND DEVELOPMENT (A) 5,760 1,784 408 954 226 189 1,619 73 840 - 1,41 841 1,006 851C AFSEARCH 4,263 1,006 3,22 66 99 85 1,625 22 551 - 1,24 842 1,006 851 851 851 851 851 851 851 851 851 851		146										146
RESIC RESEARCH 4,263 1,086 866 99 86 1,265 22 551 1,24 APPLIED RESEARCH 1,332 601 433 25 99 85 344 41 278 - 1 8	•		<del>                                     </del>	<del>                                     </del>		<del> </del>	<del>                                     </del>	<del> </del>		<del> </del>	<del> </del>	5,517
OF RESEARCH AND DEVELOPMENT - 399 212 72 113 14 82 8 41 4 82 75 87 16 87 38 1536 - 3.39 8 20 14 9 10 14 11 112 23 13 2 4 4 10 14 14 17 12 25 15 15 15 15 15 15 15 15 15 15 15 15 15	BASIC RESEARCH	4,263 1,532	1,086	433	866 25	99	86 85	1,265 344	22 41	551 278		1,418 1,240 169 88
NOT EMPLOYED	OF RESEARCH AND DEVELOPMENT TEACHING	8,736 90	2,988 45	2,106 11	824 23	775 13	87 2	4	38 4	1,536		3,399 14
RESEARCH AND DEVELOPMENT (A)	NOT EMPLOYED				133	47	t			88		143 455
BASIC RESEARCH 3,502 681 500 65 58 1,092 30 511 1,18 APPLIED RESEARCH 677 311 211 10 51 45 72 40 117 8 MANAGEWENT OR ADMINISTRATION 0F RESEARCH AND DEVELOPMENT - 207 123 30 61 13 - 17 12 27 18 PKDDUCTION AND INSPECTION 113 54 20 108 47 13 4 214 9 40 12 NO REPORT - 208 20 6 6 31 2 3 7 4 9 28 MANAGEWENT OR ADMINISTRATION 0F RESEARCH AND DEVELOPMENT (A) 45 18 3 6 2 3 7 4 9 28 MANAGEWENT OR ADMINISTRATION 0F RESEARCH 20 6 6 3 1 6 6 6 6 4 APPLIED RESEARCH 20 6 6 3 1 6 6 4 APPLIED RESEARCH 20 6 6 3 1 6 6 4 APPLIED RESEARCH 20 6 6 3 1 6 6 4 APPLIED RESEARCH 20 6 6 3 1 6 6 4 APPLIED RESEARCH 20 6 6 3 1 6 6 4 APPLIED RESEARCH 20 6 6 3 1 6 6 4 APPLIED RESEARCH AND DEVELOPMENT (B) - 10 5 2 2 1 2 3 10 7 5 2 2 1 1 2 3	BACHELUR'S DEGREE	7,392	2,501	1,252	904	250	140	1,448	130	1,006		2,557
MANAGEMENT OR ADMINISTRATION OF RESEARCH AND OEVELOPMENT - 209 123 30 61 13 17 12 27 1  TEACHING 2,124 952 769 168 77 11 13 264 81  PRODUCTION AND INSPECTION 118 54 20 29 11 4 4 8 11 2  OTHER 619 220 168 47 13 4 214 9 40 12  NOT EMPLOYED 288	BASIC RESEARCH APPLIED RESEARCH	3,562 677	681 311	211	500 10	65 51	58 45	1,092	30 40	512 117		1,282 1,183 86 26
OTHER     619   220   168   47   13   4   214   9   40     12   12   13   14   13   14   14   15   15   15   15   15   15	MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT TEACHING	209 2,124	123 952	30 769	61 168	13 77	11	17	12	27 264		17
LESS THAN BACHELOR'S OEGREE - 78 30 4 10 4 4 8 7 16 1  RESEARCH AND DEVELOPMENT (A) 45 18 3 6 2 3 7 4 9  BASIC RESEARCH 20 6 1 6 6 6  APPLIED RESEARCH 19 9 3 2 2 1 2 3  MANAGEMENT OR ADMINISTRATION (B) - 10 5 2 1 3  MANAGEMENT OR AOMINISTRATION OF RESEARCH AND DEVELOPMENT - 7 5 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	OTHER	619	220	108		1	1		1		1	20 123 
RESEARCH AND DEVELOPMENT !A) 45 18 3 6 2 3 7 4 9 BASIC RESEARCH 20 6 1			<del> </del>	<del>                                     </del>	10	4	4	8	7	16		13
MANAGEMENT OR AOMINISTRATION OF RESEARCH AND DEVELOPMENT 7 5 2 2 1 1 10 2 10 2 1 1 2 3 1 1 2 3 1 1 2 3 1 1 2 3 1 1 2 3 1 1 2 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1	RESEARCH AND DEVELOPMENT (A) BASIC RESEARCH APPLIED RESEARCH	45 20 19	18 6 9	3 3	6 7	3		7 6 1	4	<del> </del>	<del>                                     </del>	4 2 2
PRODUCTION AND INSPECTION 4 2 1 1 2 3 2 3	MANAGEMENT OR ADMINISTRATION OF RESEARCH AND DEVELOPMENT	7	5		1					3		4
NOT EMPLOYED	PRODUCTION AND INSPECTION OTHER	4			1	1	1		2	3		2

ERIC And The Art Provided by ERIC

TABLE A-48.—FIRST AND SECOND WORK ACTIVITY OF SCIENTISTS EMPLOYED AT UNIVERSITIES AND COLLEGES, BY HIGHEST DEGREE, 1964-CONTINUED

	TOTAL										
HIGHEST DEGREE AND FIRST WORK ACTIVITY		RESEAR	CH AND DEV	ELOPMENT	MANAGEMENT OR AOMINISTRATION			PRODUCTION		NOT EMPLOYED	NO REPORT OF WORK ACTIVITY
		TOTAL (A)	BASIC RESFARCH	APPLIED RFSEARCH		CF R+D	TEACHING	AND INSPECTION	OTHER		
NO REPORT OF DEGREE	264	80	48	25	18	16	53	8	25		80
RESEARCH AND DEVELOPMENT (A) BASIC (ESEARCH APPLIED RESEARCH MANAGEMENT OR ADMINISTRATION (B) - MANAGEMENT OR ADMINISTRATION	113 94 23 13	19 15 3 3	13	12 12 	8 4 4	5 2 3	45 39 6 6	6 5 1	9 7 2 1		32 29 3 2
UF RESEARCH AND DEVELOPMENT TRACHING	104 4 4	2 55 2 1	2 42 1 1	13	9	4 1	2	<u>1</u> 	14 1		1 26 5 

(A) INCLUDES DEVELOPMENT OR DESIGN NOT SEPARATELY IDENTIFIED.
(B) INCLUDES MANAGEMENT OR ADMINISTRATION OF OTHER THAN RESEARCH AND DEVELOPMENT, NOT SEPARATELY IDENTIFIED.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL. 1964.

TABLE A-49 -- NUMBER OF UNIVERSITY AND COLLEGE TEACHERS. BY STATE AND FIELD, 1964

		SCIENTIFIC AND TECHNICAL FIELD												
STATE	TOTAL	ChcM- ISTRY	EARTH SCIENCES	METEOR- OLOGY	PHYSICS	MATHE- HATICS	TURAL	BIOLOGI- CAL SCIENCES	PSY- CHOLOGY	STA- TISTICS	ECONOM- ICS	OLOGY	LINGUIS- TICS	OTHER FIELOS
ALL LOCATIONS -	49,595	8,435	2.784	237	6-406	5,241	1,498	10,148	4,874	500	4,254	i.797	784	2,537
ALABAMA	440	88	14		47	49	23	103	35	6	30	17		26
ALASKA	49			2	6		2	7	. 2	i	3	12	7	2 34
ARIZONA	535	81	41	6	64		29	79 69	63	6	54 25	13	i	13
ARKANSAS	271	55	16	i 2 : 25	680			1.026	562	55	401	171		250
CALIFORNIA -'	4,989 738	698 119	339 69	7	90			140	18		43	21	7	47
COLORADO	730 913	146	37	3	136	1 .		184	101	11	96	37	22	41
DELAWARE	128	37	5		17	12	5	21	9		12	5		4
DIST. OF COL	482	78	15		64	1		109	51	3	48	19 25		21 56
FLORIDA	937	140	51	14	106			227 157	111		71 52	18		32
GEORGIA	682	125	26	2	64 11			37	19		16	io		ii
HAWAII	190 188	25	12 15	1 2	14			39	16		19	2	2	8
IDAHO	2,849	470		14	353			528	292		310	100		138
INDIANA	1,592	304	71		229	181		255	158		167	57		80
IOWA	1,000	184	40	4	126			217	90	•	106	31		55
KANSAS	755	147	52	4	71			165	67		73	18 34		36 26
KENTUCKY	496	89	22	2	51 76			137	38	_	51	21		33
LOUISIANA	7 37	136			22			35	15		21	7	1	8
MAINE	192 869	35 153		1	163			212	70		52	25		44
MASSACHUSETTS	2,352	451		14	412			389	228		238	97		123
MICHIGAN	2.149	342		10	233			399	243		194	91		119
MINNESOTA	1,055	181	48	6	122			241	108		79	35		42 19
MISSISSIPPI	279	38			20	4		71 219	24		114	49		58
MISSOURI	1,050	, 187		5	103			48	11		13	7		10
MONTANA	217 417	, 36 56		1	51			94	43		47	14		15
NEBRASKA	91	13	1	!	12	•		11	8		15	1 2		2
NEW HAMPSHIRE	291	64		1	42	24		67	17		28	11		6
NEW JERSEY	1,105	167		5	200			178	103		92	42		82
NEW MEXICO	274	38		3	48			40	51	•	22 446	204		296
NEW YORK	5, 302	916		24	803			1,081	5 1 1 2		73	54		43
NORTH CAROLINA	1,177	188		2	110			34	100		17	1 3		6
NORTH DAKUTA	190 2,164	381		3	31			376	229		204	101	. 27	107
OHIO	576	96		, 5	66			132	45		45	13		31
OREGON	745	129		4	59			153	80	1	54	21		40
PENNSYLVANIA	2,943	567	147	9	399			566	300		259	104		169
RHODE ISLAND	332	51		1	6			50 70	29		23	12		25
SOUTH CAROLINA	362	81		1	20			36	19		17	1 2		9
SOUTH DAKOTA	195 750	1 34			94			186	70		37	16	6	32
TENNESSEE	1,810	321	1	20	228			365	149	23	129	56		83
UTAH	460	64		7	56	1	) ; 25	114	49		19	16	1	16
VERMONT	170	37	8		1:			47	14	4	15	1 3		33
VIRGINIA	790	125		2	91			190	1 68 84		60 82	26		52
WASHINGTON	978	172		7	9			205	: 21		28	10	1 _	16
WEST VIRGINIA	311	67		10	14		-	260	110	1	114	5	- 1	62
WISCONSIN	1,292	222		10	14.		-	25	1		10		2	5
WYOMING	127 118	24		2			2	31	-		8	] :	3 9	8
FOREIGN	501			3	4:		1	129	5	2 6	35	2	3 23	27
LOVETON	, ,,,	1 ~	1	1	1	1		1	1	1	1	1	l	l

NOTE - INCLUDES SCIENTISTS REPORTING COLLEGE OR UNIVERSITY TEACHING AS A FIRST OR SECOND WORK ACTIVITY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.



TABLE A-50.-NUMBER OF UNIVERSITY AND COLLEGE TEACHERS, BY STATE AND ACADEMIC RANK. 1964

		ACADEMIC RANK									NO REPORT	
STAYE	LOTAL	DEAN	PROFESSOR		ASSISTANT PROFESSOR	INSTRUCTOR	LECTURER		RESEARCH ASSISTANT	OTHER	OF ACADEMIC RANK	
ALL LOCATIONS	49,595	145	13,086	10,381	11,343	4,183	709	235	3,367	1+337	4,809	
ALABAMA ~	440	1	153	98	86	33	2	1	17	14	35	
ALASKA	49		8	7	26	4			1	2	1	
ARKANSAS	535 271	2	123	119	104	29	· 5	1	62	24	66	
CALIFORNIA	4,989	3	85	67	53	19			8	6	30	
COLORADO		*	1,266	997	1,126	336	151	20	360	104	620	
CONNECTICUT	738	1	172	165	181	54	.5	5	62	15	78	
DELAWARE	913   128	_	213 25	185	252	81	25	8	60	27	59	
DISTRICT OF COLUMBIA	482	1	25   129	26	31 121	13	1 7	1	8	11	11	
FLORIOA	937	3	255	188	210	72	5	1 5	15	8	45	
GEGRGIA	682	3	191	176	151	45	3	i	54 40	21	124	
HAWAII	190		45	42	56	13	i	l	40	13 8	58 21	
IDAHO	188	2	37	49	45	10	i		13	5	26	
ILLINOIS	2,849	20	799	540	607	272	30	18	217	58	298	
INDI ANA	1,592	7	419	337	336	128	24	5	147	61	128	
IONA	1,000	2	297	192	236	79		l ź	69	42	120	
KANSAS	755	2	210	156	175	66	2	i	46	26	71	
KENTUCKY	496	ī	135	117	128	47	ì	·	ii	5	51	
LOUISIANA	737	ī	195	159	159	63	3		50	21	86	
MAINE	192	4	53	37	41	18	ĺí		9	7	22	
MARYLAND	869		206	171	209	87	ıi	5	65	33	82	
MASSACHUSETTS	2,352	5	591	422	526	220	60	44	176	95	213	
MICHIGAN	2,149	4	600	379	420	179	42	5	181	93	246	
MINNESOTA	1,055	2	301	190	218	133	11	3	82	16	99	
MISSISSIPPI	279	2	93	71	45	21			6	3	38	
MISSOURI	1,050	1	276	230	238	107	10		64	32	92	
MONTANA	217		53	44	60	17			16	7	20	
NEBRASKA	417	1	119	92	88	39			30	8	40	
NEVADA	91	3	18	26	26	5	4	1	2	2	4	
NEW HAMPSHIRE	291	1	82	58	61	28	1	1 1	16	18	25	
NEW JERSEY	1,105	2	?74	229	295	92	18	5	95	18	77	
NEW MEXICO	274		83	61	61	8	2		23	6	30	
NEW YORK	5,302	14	1.285	1,150	1,276	503	124	35	329	143	443	
NORTH CAROLINA	1,177	5	393	255	227	83	5	13	62	13		
NORTH DAKOTA	180	1	38	43	58	11			j 11	6	j 12	
0110	2,164	3	558	457	515	211	15	4	157	68	176	
OKLAHOMA	576	2	153	122	116	52	1		56	20	54	
OREGON	745	4	203	182	166	54	5		65	11	55	
PENNSYLVANIA	2,943	5	719	682	738	252	28	25	165	91	238	
RHODE ISLAND	332	2	102	75	80	9	1	1	32	6	24	
SOUTH CAROLINA	362	3	101	92	97	13			16	13	27	
SOUTH DAKOTA	195		62	41	50	11			4	4	23	
TENNESSEE	750	3	211	186	166	57	1	4	45	20	57	
TEXAS	1,810	10	480	350	409	173	20	4	116	47	201	
UTAH	460	1	129	110	99	24	3	1	37	7	49	
VERMONT	170	1	40	40	38	j 15	1	1	6	5	23	
	790	5	240	204	187	60	.4	1	30	8	61	
WASHINGTON	978 311	5	249 98	191	211	86	12	1	98	17		
WISCONSIN		3		67	76	31	1	1	105	10	21	
MAOWING	1,292	·	344	255 19	292	122	8	8	105	18	137	
PUERTO RICO	118		39 38	25	28 24	18 14	2		6	3	14 15	
FOREIGN	501	1	98	94	119	21	52	4	21	12	79	
	20.1	L	סל	74	1174	21	76	4	41	12	1 79	

NOTE - INCLUDES SCIENTISTS REPORTING COLLEGE AND UNIVERSITY TEACHING AS & FIRST OR SECTIND WORK ACTIVITY.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1964.

# APPENDIX B 1964 Questionnaire and Specialties List

# NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL

IN THE FIFLD OF CHEMISTRY CONDUCTED BY THE

AMERICAN CHEMICAL SOCIETY

1188 SIXTEENTH STREET, N.W WASHINGTON, D. C. 20036

AND THE NATIONAL SCIENCE FOUNDATION

erica.	10H O. W.	Lerican 190	the Amarican Economic Associathematical Society, American cistles for Experimental Biolog	ANSWERS IN	DARK INK	R TYPE				
Γ					, ,	F YOUR NA	ME OR ADDR NICER CORRE PLEASE GI	CT INFO	OITANI	NCORRECT. N BELOW:
						•				10 C 111 W
ı					i					
<u></u>				_	_					
EASE SE	SURE Y	OUR POS	TAL ZIP CODE IS INDICATI	ED.						
OTE: If	you hav	ve receive	ed and completed a Nation	al Register que	stionnaire	from one o	f the other	organizat	iors lis	ted above
al	so, pleas	🥲 complet	4, please write the name of the item 1, and on the back enclosed envelope.	of the question	naire, give	your social	security n	ımber, da	te and	signature,
TA: ~~	.,		5 g A 3 8 9 8	<del></del>						
DATE O	F BIRTH	Year	2. STATE OR COUNTRY OF	FEIRTH		OR GOUNTS GRADUAT	Y OF SECO	NDARY	_	X 1 . male 2 . female
CITIZEN	ISHIP (cl	heck one)								
∏ 6 · L		LIED FOR	8 - NON-USA, perman					•		
									_	
I regar	d mysel	f professi	ionally as a (an): (check		:_A	п	Doval alorica			
_	Astrono Biologist		☐ 40 - Chemist ☐ 59 - Economist	☐ 60 - Lingu: ☐ 70 - Mathe		_	Psyc! ologist Sociologist			
_	_	Scientist	X9 - Engineer	□ 00 - Meteo	rologist		Statissician Other (spec	ify)		
_			10 - Geologist		:151	U 77-	Other (spec		•	
		ural and	a (an): (check only one		☐ 41 - Inor	ganic Chen	nist 🗆 🤉	K6 - Physic	al Che	mist
_	Food Cl		243 - Chemical E		🖺 42 – Orga			- Other		íy)
<b>□</b> 40 -	Analytic	al Chemi	st							
DUCAT	ION:					EARNED				
. COLLE	GE, UNI	VERSITY.	OR OTHER INSTITUTION (	Include city and	itate)	DEGIVES.	YEAR OF DEGREE	MV10	R	MINOR
						<u> </u>				
						ļ			-+	
								i		
_						<u> </u>		L		
			NAL EMPLOYMENT:							
Please	check t	the box v	which most fully describes	your current e	mployment	status. Ch	eck only e - Not empl	ne. oved and	not se	eking
] 1 - Full 12 - Part	time pr	rofessiona rofessiona		mine usaramire	use are c	ode)	employme	ent		
] 3 - Full	l-time pr	rofessiona	11 amminumi LI 3 + Stude	nt, not employent, and see	ed king emplo		– Employed – Retired	i, cut not i	n proie:	Sional Work
•	t-time st ———— e give n		oresent principal employer					red current	y, omit	items 9 thro
15. B	egin agai		present principal employer				of employme			•
							employer	Chaole (	nly on	
			category which is most ap	propriate for y	our presen	. Principal JTARY SER	employer. VICE-ACTIV	/E DUTT	011	
_		e indust Uployed	TRY OR BUSINESS		□ 4 - STA	TE GOVER	NMENT			
			IVERSITY, OTHER THAN ME	DICAL SCHOOL		UNTY GOVE NICIPAL GO	RNMENT VERNMENT			
_	(specify	department ranizational	or	n n - en - t			NMENT AGE		ify)	* *
□ B -			OOL OR SCHOOL SYSTEM		□ 5 - NO	NPROFIT H	 OSPITAL OR	CLINIC		
□к.	MEDICA	L SCHOO	L	·nn	TE-NO	NPROFIT O	RGANIZATIO OUCATIONAL	N. OTHER	THAN	HOSPITAL.
_			NMENT-CIVILIAN EMPLCY NONED CORPS	P.E.		HER (specif				
									<del></del>	
12 From	- thu 20	companyi	ipal service you perform o	he scientific sp	ecialization		ly related t	o your P	RESEN	T employm
and	enter bo	th the nu	imber and specialty title of	on the lines bel	ow.					
							ialty Title			

N17 107 9C-13c

# 17 45" NO PERU NO NO RES.2 \*

CURRENT PROFESSION	AL EMPLOY	ENT CON	TINJED			<del></del>				PLEASE DO NOT
13. Humber your first and son the appropriate lines	econd most in	portant k	ind of act	tivity, in term	s of wor	king time	devoted	, by ente	ring "1" and "2"	THIS COLUMN
1 - MANAGEMENT OR AD DEVELOPMENT A - MANAGEMENT OR AD	MINISTRATION			6 - PRC	LOPMEN DUCTION, N. PROCES	OPEPATI	ONS. HA		CE, EXPLOITA-	
RESEAPCH AND DEVI 2 - BASIC RESEARCH	ELOPMENT				SULTING LITY CON		SPECTION	TEST'NO	. TECHNICAL	
B - APPIJED RESEARCH 3 - TEACHING (State Acad	lemic Rank)			SER	Vicer Eg, mark					
T SHITO SO TRCSAS - 7				9 - OTH	ER (specif	у)				
14. Is ANY of your work b If yes, is your work rel 1-Agriculture	ated to any or			tums:			_	_	Don't knew	
2 - Atomic energy 5 - Defense	H-2□ H-3□	ealth ternational		□7-Natur □3-Public □9 Space	works			- -	gram (specify)	
NOTE: Salary and income be released in any						d for stat	istical p	14poses o	nly. It will NOT	
15. BASIC ANNUAL SALA		empl	oyment as	of Jan. 1964			with y	our prin	cipal professional	
If academically employed (Basic Annual Salary is your overtime, summer teaching, or other	l, check wheth annual salary b her payment for	er salary fore deduct professional	is for [] ions for in work.) Do	0-10 mos. or icome tax, soci not include ref	11-12 :	mos. Literement Sistence all	t etc. b	ut does n	ot include bonuses,	
16. ESTIMATED GROSS AN fessional income from all	NUAL PROFI	SSIONAL	INCOME	(Jar. 1 to D	ec. 31, 19	64): Ples	se 8 :	your esti	mated gross pro-	
(Gross Annual Professional Incorfees, honoraria, rental and subsit								uctions. pl	us bonuses, royalties.	
17. How many years of pr	ofessional wor	k experie	nce have	you had?						
SCIENTIFIC COMPETENCE:						7				
18. From the accompanying consider you have your	greatest scie	select and ntific com	enter on petence, l	the lines below based on your	v in decre total ed	easing ord	er the fo and wor	ur special k experie	ties in which you nce.	
Greatest: Number	*** ( 4 *	Specialty	Title	. Third:	· Yum				ecialty Title	
Second: Number		Specialty	Title	Fourth:	Nuon	ber		 Sr	ecialty Title	
LANGUAGE AND AREA	KNOWLEDGE	S:						•		
19. FOREIGN LANGUAGE: mark (V) your proficien If you have no foreign	C1 <b>4</b> 5.				ich you	have kno	wledge a	nd indica	ate with a check	
				PROFICI	ENCY					
	CAN PRI			CAN		ACILITY		READ NICAL	SOME KNOWLEDGE,	
NAME OF LANGUAGE(8)	LECTU		COI	NVERSE		NICAL NALS		C.ES Vn use	SUT CAN'T USE AS A	
	FLUENTLY 1	SUPER- FICIALLY 2	FLUENTL 3	Y PARSAFLY	INTO ENGLISH 8	FRCY ENGLISH S	EASILY 7	WITH DIFFI- CULTY	MEDIUM OF COMMUNI: CATION	
20. AREA KNOWLEDGE: 1 gained by residence, rese	List the foreign	countries	or U. S.	geographic a	reas in v	vhich you	have a	professio	nal specialization	
COUNTRY OR AREA	TOTAL YEA RESIDENCE SPECIALIZAT	OR VISI	R LAST TED OR CIALIZED	NAYU	RE OF YO	UR KNOW	LEDGE C	R SPECIA	LIZATION	
21. SOCIETY MEMBERSI- national professional s	Circle the retirs and use	umber in identifyin	front of	all societies of full:	which ye	ou are a r	nember.	For write	e-ins include only	
501. AMERICAN CHEMICAL				504. AMERIC SCIENC		CIATION F	OR THE	DVANCE	MENT OF	
502. AMERICAN INSTITUTE 503. AMERICAN INSTITUTE		ENGINEER	13	505. OTHERS 528. NONE						
22. Please give, if possible, a on reverse side.	mailing or fo	rwarding	address th	rough which	you can	always	e reach	ed, differ	ent from address	
C/O Nuraper	Str							State	Zip Code	
DATE PREPARED			sign	NATUREI (P	ease Sign 1	Full Name)		_		
SOGIAL SECURITY ND.		1								
23. If you wish to add to the	e above inform	nation con	cerning y	our profession	al emplo	yment(s)	or qua	ifications,	please comment	
below or on an attached	enters referrin	w nem	numbers v	watere approp	iate.					



#### SPECIALTIES LIST

FOR USE WITH

# NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL

This list includes a number of subfields and appropriate specialties within these subfields. The Engineering and Other Specialties subfields are not designed to give detailed specialty coverage. This "universal" list is presented in order that you may identify specialties in which you may be competent in related fields.

The sections CURRENT PROFESSIONAL EMPLOYMENT and SCIENTIFIC COMPETENCE on the 1964 National Register Questionnaire request that you indicate from this list the specialties which are most closely related to your present employment and in which you consider you have your greatest professional competence (items 12 and 18).

Please use the specific specialties and their numbers as indicated; if you find it necessary to select the "Other (specify)" category, write in the code number and give your own brief specialty title in items 12 and 18 on the Questionnaire.

#### Chemistry

Analytical Chemistry Analytical Chemistry
4001—Absorption spectroscopy
4002—Blochemical analysis
4003—Chemical and electron spectroscopy
4004—Chromatographic analysis
4005—Distillation analysis
4006—Electron-spin resonance spectroscopy
4007—Electron-spin resonance spectroscopy
4006—Elemental analysis
4010—Emission spectroscopy
4011—Extraction analysis
4012—Fluorinetry
4013—Gas analysis
4014—Gravimetry
4015—Instrument design and development
4016—Mass spectrometry 4016—Mass spectrometry 4017—Microchemical analysis

4018—Nucleonics 4019—Nuclear magnetic resonance spectroscopy dispersion 4021—Reman spectrometry 4022—Thrimetry 4023—X-ray and electron diffraction 4009—Other (specify)

#### Inorganic Chemistry

Inorganic Chemistry
4101—Alkalies and alkaline earths
4102—Atomic structure
4103—Boron and alicon compounds
4104—Building materials
4105—Coordination compounds
4106—Electronic materials; semiconductors
ferroelectrics, ferromagnetics
4107—Explosives, rocket fuels
4107—Explosives, rocket fuels
4108—Gaseous elements
4110—Glass, jused silica
4111—Halogen family
4112—Industrial carbon, graphite, carbon
black

4112—Industrial carbon, graphite, carbon black
4113—Industrial carbon, graphite, carbon black
4113—Inner-transition elements, lanthanide series and actinide series
4114—Inorganic equilibria and phase relationships
4184—Inorganic nomenclature and symbolism
4115—Inorganic reaction kinetics and mechanisms
4116—Metals and alloys
4117—Molecular and crystal structure
4118—Nonmineral products; 25bestcs, vermiculite, etc.
4119—Pigments and industrial minerals
4120—Radiochemistry, minerals and products
4121—Solutions and solvent theory
4122—Synthetic inorganic chemistry
4124—Transition elements
4125—Water chemistry
4109—Other (specify)

Organic Chemistry

# Organic Chemistry

Organic Chemistry

4201—Adhesives
4202—Agricultural chemicals
4203—Aliphatuc chemistry
4204—Alixaloids
4254—Amino acids and proteins
4258—Antiobioti's
4258—Antiobioti's
4258—Antiobioti's
4265—Carl
4207—Dyestuffs
4206—Eliastomers and related products
4210—Emulsions
4211—Explosives and rocket fuels
4212—Eluorine compounds
4213—Free radicals
4213—Free radicals
4214—Hetrrocyclics
4215—Hydrogenation
4216—Oils, fats, waxes
4217—Organometallics
4218—Perroleum, petrochemicals, other
ubricants
4219—Pharmaceuticals
4220—Phosphoros compounds
4221—Photo products
4222—Iflastics and synthetic resins
4223—Protective coatungs
4224—Reaction mechanisms
4225—Silicon compounds
4226—Simil ring compounds
4226—Simil ring compounds
4226—Sandl ring compounds
4228—Steroids
4229—Steroids
4229—Steroids
4230—Terpenes and other alicyclics
4231—Textiles and synthetic fabrics
4231—Textiles and synthetic rabrics

# Related Chemical Specialties

4:01—Adsorption and absorption
4:02—Chemical separation
4:03—Corrosion and preservation
4:03—Electrochemical operations
4:05—Chemical economics
4:05—Fuels and combustion
4:07—Fluid flow
4:08—Heat transfer
4:01—Mass transfer

4311—Materials handling
4312—Measurement and control
4313—Mechanical separation
4314—Mixing
4315—Nuclear processes
4316—Operational analysis
4317—Pilot plant
4118—Plant and process design
4319—Quelity control and standards
4319—Quelity control and standards
4309—Other (specify) 4909-Chemistry, other (specify) **Physics** Acoustics 8001—Applied acoustics, instruments and apparatus
8002—Architectural acoustics
8003—Ear and hearing
8004—Electroacoustics

8005—Infr tonics 8005—Mechanical vibrations and slock 8007—Musical instruments and music 3001—Musica: institutions
\$008—Noise
\$010—Speech communications
\$011—Theory of waves and vibrations
\$012—Ultrasonics
\$013—Underwater sound
\$009—Other (specify)

#### Atomic and Molecular Physics

Physics
\$101—Atomic, ionic and molecular beams
\$102—Atomic masses and abundance
\$103—Atomic structure and spectra
\$104—Chemical bonds and structure
\$105—Electron paramagnetic resonance
\$106—Impact und scattering phenomena
\$107—Mass spectroscopy
\$103—Molecular structure and spectra
\$110—Nelear magnetic resonance
\$100—Other (specify)

#### Electromagnetism

Electromagnetism

\$201—Antenna theory

8278—Electrical measurements and
instruments

\$202—Electromagnetic waves

\$203—Electromagnetic wave propagation

\$204—Electrom dynamics

\$205—Electron microscopy, ion optics

\$206—Gas discharge

\$206—Gas discharge

\$206—Magnetism

\$208—Magnetism

\$208—Magnetism

\$210—Microwaves

\$211—Physical electronics

\$211—Physical electronics

\$212—Quantum electronics

\$212—Quantum electronics

\$213—X-ray interactions

\$214—X-ray phenomena

\$215—X-ray technology

\$208—Other (specify)

## Elementary Particles

8301—Cosmic rays
8302—High energy accelerators
8303—High energy phenomena
8304—Particle detectors
8305—Phenomenological computer analysis
8309—Other (specify)

#### Mechanics

Mechanics

8401—Analytical mechanics

8402—Ballistics and flight dynamics

8403—Elasticity

8404—Friction

8405—High pressure physics

8408—Impact phenomena

8478—Instruments and measurements

8409—Other (specify)

#### Nuclear Physics

Nuclear Physics
\$501—Accelerators, detectors
\$502—Neutrons
\$503—Nuclear properties
\$504—Nuclear reactions and scrittering
\$505—Nuclear spectroccopy
\$505—Radioactive effects
\$507—Radioactive materials, isotoper,
\$506—Reactors
\$507—Shielding
\$509—Other (specify)

# Optics

Optics

8601—Atmospheric and space optics

8602—Color, colorimetry

8603—Fiber optics

8604—Geometrical optics

8605—Information theory, communications, image evaluation

8606—Infrared phenomena

8606—Insers

8610—Optical instruments, techniques and devices

8611—Optical instruments, techniques and devices

8612—Optical materials

8613—Photography, illumination

8614—Physical optics

8615—Physiological optics 8616—Properties of thin films 8617—Radiometry, photometry 8618—Spectioscopy 8609—Other (specify)

#### Physics of Fluids 8701—Aerodynamics

8701—Aerodynamics
8702—Aerocols
8703—Boundary layer effects
8704—Cavities and jets
8705—Compressible fluid dynamics
8705—Compressible fluid dynamics
8705—High temperature flow
8708—Incompressible fluid dynamics
8710—Magneto fluid dynamics
8711—Plasma physics
8712—Rarefied Jas flow
8714—Shock wave phenomena
8718—Structure and properties of fluids
8716—Superfluidity
8717—Transport phenomena, diffusion
8716—Turbulence
8719—Viscosity
6709—Other (specify)
Solid State Physics

#### Solid State Physics

Solid State Physics

8801—Ceramics

8802—Cooperative phenomena

8807—Crystallography

8803—Dielectrics (incl. fluids)

8804—Dislocations and plasticity

8805—Electrical properties of surfaces and junctions

8806—Electrical properties of surfaces and junctions

8806—Electron emission

8806—Ferromagnetism

8810—High polymers and glasses

8811—Internal friction

8812—Lattice effects and diffusion

8813—Luminescence

8814—Optical properties

8815—Para—and diamagnetism phenomena

8816—Photoconductivity and related phenomena 8816—Photoconductivity and related phenomena
8817—Photoelectric phenomena
8818—Piezo and ferro-electricity
8819—Quantum mechanics of solids
8820—Radiation damage
8821—Resonance phenomena
8822—Semiconductors
8822—Superconductivity
8824—Surface structure and kinetics
8825—Thermal conduction in solid state
8826—Thin films
8809—Other (specify)

#### Thermal Physics

Thermal Physics

8B01—Calorimetry

8B02—Heat transmission

8B03—High temperature physics

8B04—Low temperature physics

8B05—Therperature and its measurement

8B05—Thermadynamics

8B07—Thermodynamic relations,
equations of state

8B06—Thermodynamic tables

8B06—Other (specify)

# Other Physics Specialties

Other Physics Specialties

8X53—Constants, standards, unite,
metrology, conversion factors

8X02—Energy conversion problems

8X03—Field theory

8X04—High veruum techniques

8X05—Many body theory

8X05—Mathematical physics

8X07—Mossbauer effect

8X06—Quantum mechanics

8X10—Relativity and gravitation

8X11—Statistical mechanics and kinetic
theory

8903—Physics, other (specify) 8909-Physics, other (specify)

#### Astronomy

X001—Astrometry
X002—Astrophysics
X003—Cele stal mechanics
X004—Correts, meteors, interplanetary
m' dium
X005—De sign of astronomical instruments
X007—Grigan of cosmic rays
X008—De sign of astronomical sources
X012—Physics of the interstellar medium
X013—Planets, satellites
X014—Radio astronomy
X015—Space astronomy
X015—Space astronomy
X015—Space astronomy
X015—Space astronomy
X016—Spaceracopy of astronomical
sources
V017—Star systems and statistical sources X017—Star systems and statistical X018—Stellar energy generation, nucleo-scale energy generation, nucleo-x019—The sun X020—Variable stars X006—Other (specify)

NSF FORM 9C-14x

10



#### Atmospheric, Lithospheric, and Hydrospheric Specialties

Atmospheric Dynamics, Chemistry, and Physics

Aer anomy -Airglow
-Airmospheric chemistry
-Atmospheric electricity
-Amospheric optics and acoustics
-Atmospheric thermodynamics 0003—Atmospheric chemistry
0004—Atmospheric electricity
0005—Atmospheric optics and acoustics
0006—Atmospheric thermodynamics
0007—Aurora
0008—Cloud and precipitation physics
0101—Composition
0011—Dynamics of atmospheric motion
0012—Magnetohydrodynamics
0013—Planetary atmospheres
0014—Radiation
0015—Solar-cerrestrial relationships
0016—Turbulence and diffusion
0008—Other (specify)

Climatology 0101—Bioclimatology 0102—Microclimatology 0103—Paleoclimatology 0104—Physical chmatology 0105—Synoptic climatology 9109—Other (specify)

0201—Hydrometeorology
0202—M-someteorology
0202—M-someteorology
0204—Numerical analysis and prediction
0205—Observations
0206—Radar meteorology
0207—Weather analysis and forecasting
0209—Other (specify)

Synoptic Meteorology

Area Specializations carea opecializations
301—Agricultural meteorology
0302—Air pollution
0303—Aviation meteorology
0304—Marine meteorology
0305—Polar meteorology
0306—Tropical meteorology
0306—Other (specify)

Meteorological Instrumentation 0401—Automatic data sensing systems 0402—Balloon sounding systems 0403—Badar and radio instrumentation 0404—Rocket sounding systems 0405—Satellite instrumentation 0409—Other (specify)

Geochemistry 1001—Cosmochemistry
1002—General inorganic ge-chemistry
1003—Isotopes and geochronology
1004—Mineral synthesis and stability re-lations of minerals
1005—Organic geochemistry
1009—Other (specify)

Geodesy 1101—Earth motions 1102—Geodetic instrumentation 1103—Geodetic surveying 1104—Gravity 1105—Navigation, geodetic astronomy 1109—Other (specify)

Geology
1201—Areal geology
1202—Engireering geology
1203—General field geology
1204—Geology of ground water
1205—Geology of mineral deposits
1206—Geology of petroleum deposits
1206—Geology of solid fuels
1206—Geology of solid fuels
1206—Geomorphology
1201—Geomorphology
1201—Petrography and petrology, igneous
and metamorphic
1212—Petrography and petrology, sedimentary
1213—Photogeology
1214—Stratigraphy
1215—Structural geology, igneous and
metamorphic
1216—Structural geology, sedimentary
1208—Other (specify)
Paleontology
Paleontology Geology

Paleontology 1301—Micro, aleontology 1302—Paleobotany 1303—Paleontology, invertebrate 1304—Paleontology, vertebrate 1305—Palynology 1308—Other (specify)

Solid-Earth Geophysics 1401—Geomagnetism and electricity
1402—Geophysical surveying
1403—fravity
1404—Heat flow
1405—Physical properties of materials
1406—Seismology, induced vibrations
1407—Seismology, natural vibrations
1403—Tectenograysics
1403—Other specify)

Geog aphy Geography

1501—Bioger graphy

1502—Cultu al geography

1571—Economic geography

1503—Historical geography

1504—Milit any geography

1505—Phili sophy of geography

1506—Phy deal geography

1507—Pol'tical geography

1508—Rejional geography

1510—Theoretical geography

1510—Theoretical geography

1510—Openymy

1509—Other (specify)

Hydrology Hydrology
1601—Chemistry of water
1602—Erosion and sedimentation
1603—Evaporation and transpiration
1604—Glaciology
1605—Ground waters
1606—Precipitation
1607—Snow, ice, and permafrost
1606—Soil moisture
1610—Surface waters
1609—Other (specify)

Oceanography 1701—Biological oceanography
1702—Chemical oceanography
1702—Chemical oceanography
1703—Descriptive oceanography
1704—Hydrography
1705—Ocean-bottom processes
1706—Physical oceanography
1707—Plankton
1708—Sea-air interactions
1710—Shore and near shore pro
1711—Underwater sound
1709—Other (specify) 1909-Atmospheric, lithospheric, and hydrospheric special-

#### Mathematics

ties, Other (specify)

Algebra 7601—Boolean algebra
7602—Combinatorial analysis
7603—Differential algebra
7604—Fields, rings, elgebras
7605—Groups, generalizations
7606—Homological algebra
7607—Lattices

7009—International algebra and matrix theory 7010—Order, total and partial 7011—Polynomials 7012—Representation theory 7009—Other (specify)

Analysis and Functional Analysis 7101—Banach spaces and algebras 7102—Calculus of variations 7103—Convexity, inequalities 7169—Difference equations, functional 1103—Difference equations, functional equations
1104—Functions of real variables
1105—Functions of a complex variables
1105—Functions of several complex variables
1107—Hilbert spaces
1108—Integral equations
1110—Integral transforms
1111—Interpolation, approximation
1112—Lie groups and algebras
1113—Measure, integration, area
1114—Operational calculus
1187—Ordinary differential equations
1188—Partial differential equations
1115—Potential theory, subharmonic functions

functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functions
functi

Geometry Geometry
7201—Affine geometry
7202—Algebraic geometry
7203—Complex manifolds
7204—Convex domains, extremum problems
7205—Differential geometry, tensor analysis
7205—Euclidean geometry
7207—Finite geometries
7206—Foundations
7210—Integral geometry
7211—Projective, non-Euclidean geometries
7212—Riemannian geometry —Riemannian geometry —Other (specify)

7301—Applications of logic 7302—Formal and symbolic logic 7303—Foundations of mathematics 7304—Intuitionism 7305—Recursive functions 7309—Other (specify) Mathematics of Resource Use

Logic

Mathematics of Resource U.
7401—Activity analysis
7402—Actuaral mathematics
7403—Blometrics, blostatistics
7404—Control systems
7405—Cryptography
7406—Dynamic programming
7470—Econometrics
7467—Game theory
7406—Information and communication
7408—Information and communication
7408—Organics, military
7416—Jogistics, military
7416—Organics, systems evaluation
7412—Theory of the firm
7413—Linear programming
7414—Non-linear programming
7414—Non-linear programming
7415—Network flow
7416—Quetting
7418—Distribution and transportation
7418—Distribution and transportation 7418-Distribution and transportation 7419—Instruction and transpor 7419—Inventory 7420—Replacement, and renewal 7421—System reliability 7422—Adaptive systems 7423—Management gaming 7406—Other (specify)

Number Theory 7501—Algebraic number theory 7502—Analytic number theory 7503—Diophantine problems 7504—Elementary number theory 7503—Geometry of numbers 7509—Other (specify) Computation

7601—Algorithm construction
7601—Algorithm construction
7602—Analogue systems, coding and
7603—Difference and functional equations
7603—Difference and functional equations
7603—Digital computers, operating systems,
programming (Program preparation, monitoring, debugging)
7604—Digital computers, design and translation of artificial languages
7605—Digital computers, machine translation of natural languages
7607—Digital computers, information
retrieval
7607—Digital computers, control systems
7608—Digital computers, heuristic programming
7610—Digital computers, design
7611—Eigenvalues
7612—Error analysis
7613—General methods, iteration
7614—Interpolation, approximation, curvefitting
7615—Integral and integro-differential Computation 7615—integral and integro-differential constitutions, matrices 7617—Nomography, tables 7618—Numerical differentiation, quadrature 7687—Ordinary differential equations 7688—Partial differential equations 7609—Other (specify) Topology

Numerical Methods and

1 Opology
T701—Abstract spaces
T702—Applications to analysis
T703—Fibre bundles and spaces
T704—Graphs
T705—Homology, cohomology
T705—Homology, cohomology
T707—Manifolds, Kaehler spaces
T703—Mappings
T710—Point-set topology
T711—Topological dynamics
T712—Topological groups
T709—Other (specify)

Depolative

Probability Probability

7801—Analytic probability theory

7802—Applications of probability

7804—Limit theorems

7805—Stochastic processes, general

7806—Markov processes

7807—Theory of generating functions

7806—Time series

7809—Other (specify) 7909-Mathematics, other (specify)

#### Biology

Anatomy 2001—Comparative 2002—Embryology; developmental 2002—Emdocrines 2003—Gross 2004—Histological 2005—Neuroanatomy 2006—Pathological 2007—Sense organs 2006—Fatnological 2007—Sense organs 2008—Surgical 2010—Topographic; systemic 2008—Vetermary 2009—Other (specify) Bouny

Bo'any
2101—Bryology
2102—Dendrology
2103—Limnology
2104—Mycology
2105—Nutrition and growth
2105—Parasitology
2107—Phycology
2108—Plant anatomy and morphology
2110—Plant physiology
2111—Pterndology
2114—Taxonomy
2109—Other (specify) Ecology 2257—Animal 2289—Plant 2209—Other (specify)

Entomo!ogy Entomology
2301—Agricultural
2302—Apricultural
2303—Control, chemical
2304—Control, other
2305—Forest
2306—Insect pets
2307—Insect physiology, morphology,
development
2306—Medical
2394—Taxonomy
2309—Other (specify)

Genetics 2457—Animal 2401—Human 2483—Microorganisms 2483—Plant 2402—Population studies 2409—Other (specify)

Immunology Immunology
2501—Allergies
2502—Antibody formation
2503—Antigen.; antibodies
2504—Antigen.; antibodies
2505—Bod greeps
2505—Complement
2507—Ziypersensitivity
2508—Immunochemistry
2510—Infection, resis ance
2511—Tissue antibodies, auto-antibodies
2596—Transplantation
259.—Vaccines
2509—Other (specify)

3302—Field crops 3303—Pasture and forage crops 3304—Seeds 3305—Turf and ornamental crops 3306—Weed control 3309—Other (specify) Microbiology
2558—Antibiotics
2501—Bacteriology
2568—Bacteriophage
2502—Biologicals
2565—Cell culture
2568—Cytology; morphology
2503—Food products
2581—Metabolism
2502—Microbial processes, syntheses
2504—Mycology
2505—Parasitology
2505—Protozoology
2506—Taxanony
2509—Other (specify)
Nutrition Microbiology Methodology B201—Computer techniques
B202—Experimental socialisms
B202—Experimental socialisms
B203—Field data collection
B204—Measurement and ladex construction
B205—Model building
B205—Qualitative analysis
B207—Statistical analysis
B208—Survey design
B208—Other (specify) Animal Husbandry 3401—Large animal 3402—Poultry 3403—Small animal 3409—Other (specify) Population B301—Internal migration
B302—International migration
B303—Jabor force
B304—Population chara-teristics
B305—Population trerat
B306—Vital statistics
E308—Other (specify) Fish and Wildlife 3501--Controls
3502--Food habits
3503--Habitat influences
3504--Population dynamics
3505--Propagation and managem
3509--Other (specify) Nutrition –Amino acids, peptides, proteins –Animal -Atherosclerosis -Carbohydrates Forestry Rural-Urban Sociology -Cell; tissue culture -Clinical P401—Community stricter
B402—Human ecology
B403—Rural sociology
F134—Urban sociology
R403—Other (specify) -Erosion control -Management 2768—Clinical 2701—Disastion 2702—Energy metabolism 2704—Enzymes; coemym 3004-Products 3005—Products
3005—Protecti vn
3605—Range .nanagement
3005—Silviculture
3607—Watershed management
3603—Other (specify) 2702—Energy metabolism
2714—Enrymes; coensymes
2703—Food and feed additives
2704—Food pathogens; toxicity
2705—Food technology
2708—Lipids
2706—Minerals; trace elements
2707—Nutritional diseases
2708—Nutrients; nutrient values
2710—Requirements; deficiencies
2732—Steroids
2739—Vatamins
2706—Other (specify)
Pathology Social Change and Pevelopment B501—Invention and innovation B502—Social control B503—Social process B504—Social mobility B505—Socio-economic developm B509—Other (specify) Horticulture 3762—Breeding, hybridization 3761—Floriculture 3762—Fruits 3763—Vegetables 3769—Cther (specify) Social Organization, Structure, Pathology Other Bio-Medical Specialties Pathology
2853—Atterosclerosis
2864—Cardiovascular
2865—Cell; tissue culture
2865—Clinical
2875—Endotoxins
2875—Hematology
2801—Immunopathology
2805—Oncology; carcinogenesis
2890—Radiation
2802—Th'ombosis
2808—Transplantation
2803—Other (specify)
Dhaymagy.logy 3001—Dentistry
3002—Epidemiology
3003—Internal medicine
3005—Pediatrics
3005—Pychiatry
3005—Public health
3007—Surgery
3008—Veterinary medicine
3009—Other (specify) and Institutions and Institution
Bottle-Bureaucray
Bottle-Cultural—th A
Bottle-Cultural—th A
Bottle-Educational
Bottle-Family
Bottle-Endustrial
Bottle-Industrial
Bottle-Intergroup
Bottle-Knowledge
Bottle-Educational
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Scientific
Bottle-Scientific
Bottle-Scientific
Bottle-Scientific
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Councional
Bottle-Coun 2908-Biology, other (specify) Pharmacology Pharmacology
2B01—Autonomic
2B61—Bochemical
2B64—Cardiovascular
2B02—Cellular
2d63—Chemotherapy
2B66—Clinical
2B04—Drug metabolism
2B72—Endocrines
2B05—Neuropharmacology
2B06—Pharmacodynamics
2B07—Psychopharmacology
2B06—Renal
2B10—Toxicology
2B09—Other (specify)
Physiclogy Psychology Clinical Psychology Clinical Psychology
9001-Behavior problems
9002-Crime and delinquency
9003-Experimentel psychopathology
9005-Individual dugnosis
9005-Mental deficiency
9007-Objective tests
9008-Projective techniques
9008-Projective techniques
9010-Psychotherapy
9011-Speech pathology
9008-Other (specify) Social Problems, Social Disorganization B701-Criminology
B702-Deviance
B703-Poverty and dependence
B703-Poverty and dependence
B705-Other (specify) B\$09-Sociology, other (specify) Physiology **Economics** Counseling and Guidance 2X01—Altunde, environment, stres
exercise
2X58—Anesthesiology
2X64—Cardiovascular
2X65—Cell; tissue culture
2X62—Central nervous system
2X63—Electrolyte, water balance
ext72—Endocrines
2X04—Gestrointestinal
2X75—Hematology
2X79—Lipids
2X61—Metabolism
2X62—Metabolism
2X63—Neurophysiology
2X790—Realiation
2X63—Respiration
2X64—Respiration
2X66—Respiration
2X61—Temperature regulation
2X66—Transplantation
2X68—Other (specify)
Fhytopathology Educational counseling
-Nondirective therapy
-Personal adjustment
-Rehabilitation
-Vocational counseling
-Other (specify) 2X01-Altitude, environment, stress, space, General Economic Theory 5001—General equilibrium (including general welfare economics)
5002—Economic fuctuations
5003—Economic forcasting
5004—Macroeconomic theory
5005—Methodology
5005—Microeconomic theory
5005—Other (specify) Developmental Psychology 9201—Chirdhood and adolescence 9202—Maturity and old age 9203—Nursery and pre-school 9203—Other (specify) Economic History; History of Thought Educational Psychology 5176—Economic history 5191—History of thought 5108—Other (specify) Educational Psycholo 301—Educational measurement 302—Programmed learning 303—School adjustment 304—School learning 305—Special education 9305—Student personnel 307—Teacher personnel 300—Other (specify) Economic Systems: Development and Planning 5201—Economic systems
5202—Economic planning
5203—National economic development
5204—Regional economic development
5208—Other (specify) 9401-Engineering Psychology Phytopathology F hytopathology
3001--Bacterial
3002--Disease control, chemical
3003--Lisease control, other
3004--Fungal
3005--Bost resistance
3006--Nematodal
3007--Physiogenic
3008--Viral
3009--Other (specify) General Psychology **Economic Statistics** 9576—History and biography 9501—Theory and systems 9509—Other (specify) 5370—Econometries
5301—Input-output and programming
methods
5302—Social accounting
5303—Statistical methods
5308—Other (specify) Industrial and Personnel Psychology

2601—Employee and executive training and development

9602—Employee morale and attitudes

9603—Job analysis and position classification

9604—Labor-management relations

9605—Arket research, advertising

9605—Performance evaluation, criterion development

9607—Recruiting, selection, placement

9608—Safety research and training

9610—Salary and pay plans

9608—Other (specify) Psychology Monetary and Fiscal Theory Virology Virology
3101—Arbor viruses
3100—Bacteriophage
3102—Dermatropic viruses
3103—Enteric viruses
3104—Interference, latency
3105—Pantropic viruses
3105—Pantropic viruses
3107—Pcx viruses
3107—Pcx viruses
3107—Vaccines
3101—Viscerotropic viruses
3106—Other (specify) and Institutions 5401-Central government finance; fiscal 5401—Central government policy 5402—Commercial banking and other short-term credit 5403—Consumer finance and mortgage credit 5404—Monetary theory and policy 5405—State and local finance 5408—Other (specify) International Economics Personality 5501—Fereign exchange, international finance finance sectional finance sectional finance finance finance finance finance finance finance finance finance finance finance finance finance finance finance finance finance fin 701:-Development
9702-Measurement
9703-Personality and learning
9705-Personality and perception
9705-Personality theory
9707-Structure and dynamics
9708-Other (specify) Zoology Z00logy
3288—Cytology
3201—Development and growth
3272—Herpetology
3203—Inthyology
3204—Invertebrate
3205—Limnology
3205—Mammalogy
3206—Parasitology
3210—Protoxoology
3214—Tuxoroony Business Finance and Administration; Marketing \$601-School Psychology and Accounting and Accounting

500.—Accounting

500.—Accounting

500.—Business finance

500.—Business organization

500.—Insurance (private)

500.—Insurance (private)

500.—Insurance (private)

500.—Insurance (private)

500.—Insurance (private)

500.—Insurance (private)

500.—Insurance (private)

500.—Insurance (private)

500.—Managerial economics and industrial

management

500.—Marketing

500.—Other (specify) 9008-Psychology, other (specify) 3294—Taxonomy 2211—Vertebrate 3268—Other (specify) Sociology Agrenomy B001-Applied Sociology (specify) 3362—Crop breeding, hybridization 3301—Crop management B101-General Sociology

210

Industrial Organizations; Government and Business: Industry Studies Industry Studies

5701—Industrial organization and market
structure; business, price, and
related policies

5702—Policies concerning competition and
inonopoly; government ownership
and operation; wartime operations
and control

5703—Public utilities; transportation,
communications

5704—Studies of manufacturing, construction, and service industries

5709—Other (specify) Land Economias 5801—Agricultural economics; forestries and fisheries sand fisheries
5871—Economic geography
5802—Natural resources; mining
5809—Other (specify) Labor Economics 5B01—Labor markets
5B02—Public policy; role of government
5B03—Trade unions; collective pargaining:
labor management relations
5B04—Wages, hours, conditions of
employment
5B08—Other (specify)

Population; Welfare Programs; Standards of Living

5X01—Consumer economics; level and standards of living 5X02—Population; migration 5X03—Publis housing 5X04—Weifare programs and social 5X09—Other (specify)

5908—Economics, other (specify)

# Linguistic Specialties

Applications to Language Teaching

Teaching

0001—Language spititude testing

0002—Language proficiency testing

0003—Linguistic principles of second

language pedagogy

0004—Linguistics and the design of

language terthooks

0005—Utilization of language laboratories

0006—Vocabulary selection

0008—Other (specify)

Descriptive Linguistics Descriptive Linguistics
6102—Contrastive structure studies
6102—Vislect geography
5103—Field methods
6104—Graphemics
6105—Kinesics
6105—Lexicography
6107—Metrics
6106—Morphology
6110—Paralanguage
6111—Phonology
6112—Structural analysis
613—Syntax
610—Other (specify)

General Linguistics 6201—Bilingualism
6202—Children's language
6203—Language typology
6204—Language typology
6204—Language universals
6205—Logical basis of linguistic theory
6206—Mathematical models in linguistics
6207—Statistical studies of language
6208—Study of meaning
6208—Study of meaning
6210—Theory of grammar
6211—Theory of translation
6208—Other (specify)

Historical and Comparative Linguistics

6301—Etymology 6302—Glottochronol ty 6303—History or specific languages 6304—Processes of language change 6304—Suppropring 6304—Subgrouping 6309—Other (specify)

Language in Relation to Other Fields

6401—Animal communication
6478—History of Imgulatics
6402—Language and culture
6403—Physiology of speech and hearing
6403—Physiology of speech and hearing
6404—Psycholinguistics
6405—Sociology of language
6408—Other (specify) Language Policies

6501—Language standardization 6502—Problems of linguistic minorities 6502—Translation of technical terminology 6504—Use of vernacular in education 6508—Other (specify) Literacy and Writing Systems

6001.-Devising of writing systems 6002-Materials for new literates 6003-Teaching of literacy 6003--Other (specify) Mechanized Applications reaconamized Applications
6701—Application of linguistics to automatic abstracting
6702—Application of linguistics to information reviewal
6703—Automated linguistic analysis
6704—Linguistic problems of machine translation
6708—Other (specify)

**Phonetics** 6801—Acoustic phonetics 6302—Articulatory and instrumental phonetics 6803—Instrumentation 6804—Phonetic transcription 6805—Speech spectrography 6806—Speech synthesis 6807—X-ray studies 6809—Other (specify)

> Interdisciplinary Specialties Agricultural and Food Chemistry

6909-Linguistics, other (specify)

X101—Alcoholic beverages
X102—Animal and vegetable fats, oils
X103—Animal feeds
X104—Bakery and confectionery products
X105—Cereals, cartohydrates
X105—Fertulaer processing
X107—Flavors
X104—Food and feed additives
X105—Fortulaer processing
X107—Flavors
X104—Food and feed additives
X1104—Fruits vegetables injects X110-Fruits, vegetables, juices X111-Meat, fish, dairy, and poultry products X183-Microorganisms; bacteria, yeasts,

Xis—Microorganisms,

- 'gae, mold
X112—vonalcoholic beverages
X113—Pesticides; insecticides, herbicides,
fungicides
X114—Plant growth regulators
X109—Other (specify)

Biochemistry

X254—Amino acids, peptides, proteins
X201—Antimetabolites
X201—Antimetabolites
X203—Carbohydrates
X263—Carbohydrates
X264—Carbohydrates
X274—Enzymes, coemymes
X274—Enzymes, coemymes
X204—Fermentation
X205—Intermediary metabolism, biosynthesis
X279—Lipids (phospho-, glyco-, fats, oils)
X261—Medicinal chemistry
X279—Lipids (phospho-, glyco-, fats, oils)
X261—Medicinal chemistry
X279—Lipids (phospho-, glyco-, fats, oils)
X262—Microbiological chemistry
X207—Nucleic ands (purines,
yrymidlines)
X208—Photosyntheses
X210—Physical biochemistry
X292—Steroids
X211—Technology, methodology
X258—Vitamins
X213—Other (specify)
Biophysics Riochemistry

**Biophysics** Biophysics
K301—Bioacoustics
K302—Bioelectricity
K303—Bio-optics
K304—Biosystems, control communications
K305—Biothermics and bioenergetics
K305—Biotransport, membrane physics
K305—Cellular
K305—Cellular
K305—Crystalliopraphy
K306—Health physics
K310—Methodology, instrumentation
K311—Molecular
K330—Radiation
K300—Other (specify) Electronics

X401—Electron ballistics
X402—Electron tubes
X402—Electronic device circuitry
X404—Electronics instrumentation
X405—Emission
X405—Emission
X405—Gaseous electronics
X407—Gaseous electronics
X407—Guille state electronics
X4105—Other (specify)

experimental, Comperative, and Physiological Psychology X501-Animal learning X502-Apparatus design and evaluation X503-Audition X504-Autocomic function X504-Autocomic function XSO2—Apperatus design and evaluation
X504—Audition
X504—Autonomic functions
X505—CNS functions
X505—Communications research, information theory
X507—Electroencephalography
X507—Electroencephalography
X508—Feeling and emotion
X510—Human learning
X511—Motivation
X512—Motor skills
X513—Perception
X514—Psychoph sics
X513—Perception
X514—Psychoph sics
X515—Sensory rocesses
X515—Sensory rocesses
X515—Symbolic processes, problem
solving
X517—Vision
X508—Other (pecify)

Physical Chemistry

K801—Catalysis

K602—Chemical kinetics

K603—Colloid chemistry

K804—Crystal structure

K803—Determination of physical constants

K803—Determination of physical constants

K803—Electrochemistry

K803—Electrochemistry

K803—Finames and explosives

K803—Figh pressure chemistry

K810—High pressure chemistry

K812—Lota exchang and applications

K813—Lova temper are studies

K813—Lova temper are studies

K813—idolecular quantics

K813—idolecular energy levels

K814—Molecular geometry

K814—Phase equilibria

K815—Phase equilibria

K819—Photochemistry and energy transfer

K800—Polymer chemistry

J821—Radiation chemistry Physical Chemistry

X622—Solid state chemistry
X623—Solutions of electrolytes and
nonelectrolytes
X624—Surface chemistry
X625—Thermochemistry
X695—Thermochemistry
X695—Valence theory
X609—Other (specify) **Psychometrics** 

X701—Experimental design
X702—Factor analysis
X703—High-speed computers
X704—Mathematical models
X705—Test construction, validation
X705—Test theory, scale analysis
X709—Other (specify)

Soil Specialties X801—Fertility, management
X802—Soil bacteriology
X803—Soil chemistry
X904—Soil genesis, classification and
mapping
X805—Soil mechanics and engineering
X805—Soil minimalogy
X807—Soil or servation
X609—Other (specify)

Social Psychology XB01-Athtudes XB02-Collective behavior and social XB02—Collective behavior and movements
XB03—Culture and personality
XB04—Group interaction
XB05—Leadership
XB06—Public opinion
XB07—Reference groups
XB08—Role behavior
XB10—Social perception
XB11—Symbolic communication
XB09—Other (specify) Statistics

Statistics

BSS—Analytical statistics

BBIO—Decision theory, sequential analysis

BBIO—Decision and analysis of experiments

BBIO—Estimation and testing, parametric

BBIO—Multivariate analysis

BBIO—Outlity control

BBIO—Sampling techniques

BESS—Survey methods: including forms

design, data collection and data

processing

BBIO—Theory of statistical inference

ELIO—Time ser's analysis

BBIO—Other (specify)

Other Specialties

Other Specialtics

XX01—Abstracting
XX02—Anthropology
XX03—Archeology
XX03—Archeology
XX03—Archeology
XX05—Code development
XX51—Compiling and editing
XX05—Compiling and editing
XX06—Brography
XX07—Education
XX08—Fine and applied aris
XX10—History
XX16—History
XX16—History
XX12—Indexing
XX12—Indexing
XX12—Indexing
XX13—Industrial hygiene and occupational health
XX77—Information retrieval
XX14—Information system design
XX15—Journalism
XX16—Inv. jurisprudence
XX17—Information system design
XX18—Indexing
XX18—Inv. jurisprudence
XX17—Information system design
XX18—Inv. jurisprudence
XX17—Information system design
XX18—Inv. jurisprudence
XX17—Information system design
XX18—Nusic
XX84—Nomenclature
XX19—Patent law
XX20—Philosophy
XX21—Photogrammetry
XX21—Photogrammetry
XX22—Political science
XX22—Project appraisal and control
XX24—Public administration
XX25—Patent
XX25—Translation
XX08—Other (specify)

Engineexing

Engineering

X901—AERONAUTICAL AND ASTRONAUTICAL ENGINEERING
X902—AGRICULTURAL ENGINEERING
X903—ARCHITECTURAL ENGINEERING
X904—CERANGC ENGINEERING
X904—CERANGC ENGINEERING
X905—CIVIL ENGINEERING
X905—CIVIL ENGINEERING
X905—ZIECTRONIC ENGINEERING
X910—ELECTRONIC ENGINEERING
X910—ELECTRONIC ENGINEERING
X912—ENGINEERING MECHANICS
X912—ENGINEERING MECHANICS
X914—ENGINEERING SCIENCE
X915—GEOLOGICAL ENGINEERING
X915—GEOLOGICAL ENGINEERING
X915—MATERIALS ENGINEERING
X917—INDUSTRIAL ENGINEERING
X919—MECHANICAL ENGINEERING
X920—ISTALLURGICAL/PHYSICAL
METALLURCY ENGINEERING
X921—MINERAL ENGINEERING
X921—MINERAL ENGINEERING
X922—MINING/MINING GEOLOGY
ENGINEERING
X923—NAVAL ARCHITECTURAL/
MARINE ENGINEERING
X924—NUCLEAR ENGINEERING
X925—PETROLEUM/PETROLEUM
REFINING ENGINEERING
X925—SANITARY ENGINEERING
X927—TEXTILE ENGINEERING
X927—TEXTILE ENGINEERING
X928—SANITARY ENGINEERING
X928—SANITARY ENGINEERING
X929—TEXTILE ENGINEERING
X921—TEANSPORTATION ENGINEERING
X921—TEANSPORTATION ENGINEERING
X921—TEANSPORTATION ENGINEERING
X921—TEANSPORTATION ENGINEERING
X921—TEANSPORTATION ENGINEERING
X922—TEANSPORTATION ENGINEERING
X922—TEANSPORTATION ENGINEERING
X923—WELDING ENGINEERING
X924—ENGINEERING, OTHUR (specify) Engineering

# APPENDIX C

# Subfields Included in Each Scientific and Technical Field

# Chemistry

Analytical chemistry
Inorganic chemistry
Organic chemistry
Related chemical specialties
Chemistry, other
Agricultural and food chemistry
Biochemistry
Physical chemistry

# Earth sciences

Geochemistry
Geodesy
Geology
Paleontology
Solid-earth grophysics
Geography
Hydrology
Oceanography
Atmospheric, lithospheric, and hydrospheric specialties, other

# Meteorology

Atmospheric dynamics, chemistry, and physics
Climatology
Synoptic meteorology
Area specializations
Meteorological instrumentation

# Physics 1

Acoustics
Atomic and molecular physics
Electromagnetism
Elementary particles
Mechanics
Nuclear physics
Optics
Physics of fluids
Solid state physics
Physics, other

# Physics—Continued

Thermal physics
Other physics specialties
Astronomy
Electronics

# Mathematics

Algebra
Analysis and functional analysis
Geometry
Logic
Mathematics of resource use
Number theory
Numerical methods and computations
Topology
Probability
Mathematics, other

# Agricultural sciences

Agronomy
Animal husbandry
Fish and wildlife
Forestry
Horticulture
Soil specialties

## Biological sciences

Anatomy
Botany
Ecology
Entomology
Cenetics
Immunology
Microbiology
Nutrition
Pathology
Biology, other
Pharmacology
Physiology
Phytopathology

# Biological sciences—Continued

Virology Zoology Other bio-medical specialties Biophysics

# Psycholog J

Clinical psychology
Counseling and guidance
Developmental psychology
Educational psychology
Engineering psychology
General psychology
Industrial and personnel psychology
Personality
School psychology
Psychology, other
Experimental, comparative, and physiological psychology
Psychometrics
Social psychology

# Statistics

**Statistics** 

# **Economics**

General economic theory
Economic history; history of
thought
Economic systems; development
and planning
Economic statistics
Monetary and fiscal theory and
institutions
International economics
Business finance and administration; marketing and accounting
Industrial organizations; government and business; industry
studies

# Subfields Included in Each Scientific and Technical Field-Continued

# Economics—Continued

Land economics
Economics, other
Labor economics
Population; welfare programs;
standards of living

# Sociology

Applied sociology
General sociology
Methodology
Population
Rural-Urban sociology

# Sociology—Continued

Social change and development Social organization, structure, and institutions Social problems, social disorganization Sociology, other

# Linguistics

Application to language teaching
Descriptive linguistics
General linguistics
Historical and comparative linguistics

# Linguistics—Continued

Language in relation to other fields
Language policies
Literacy and writing systems
Mechanized applications
Phonetics
Linguistics, other

# Other

Other specialties Engineering

# APPENDIX D

# Language Family List Used by the National Register

# Indo-European

Indic

Hindi-Urdu Bengali Gujerati Singhalese Marathi Oriya Panjabi Indic, other

Iranian

Persian
Pashtu
Kurdish
Iranian, other

Balto-Slavic

(Lithuanian and Lettish)
Russian

Baltic

Polish
Czech and Slovak

Czech and Slovak Serbo-Croatian Bulgarian Ukrainian Slavic, other

Romance

French
Spanish
Italian
Portuguese
Rumanian
Romance, other

Germunic

German
Swedish
Dutch
Norwegian
Danish
Germanic, other

Indo-European—Con.

Indo-European, other

Celtic Modern Greek Armenian Albanian Indo-European, other

Afro-Asiatic

Semitic

Arabic Hebrew Amharic Semitic, other

Afro-Asiatic, other

Berber Cushitic Hausa and Afro-Asiatic, other

African

Niger-Congo

Swahili Xhosa and Zulu Bantu, other Akan (Twi and Fante) Ibo

Yoruba
Fula(ni) (Fulbe, Ful, Peul, or Peuhl)
Niger-Congo, other

Sub-Saharan African, other

**Uralic-Altaic** 

Osmanli Turkish
(Istanbul and Anatolian)
Turkic, other
Mongolian
Altaic, other
Hungarian

Uralic-Altaic—Con.

Finnish Estonian and other Balto-Finnic Uralic, other

East-Asian

Sino-Tibetan

Mandarin Chinese
Chinese, other
Thai-Lao
Burmese
Tibetan
Vietnamese
Cambodian (Khmer)
Southeast Asian, other
Japanese
Korean

Malayo-Polynesian

Indonesian

Malay and Bahasas Indonesian
Javanese
Sundanese
Madurese
Tagalog
Visayan
Ilocano
Malagasy
Indonesian, other

Malayo-Polynesian, other

Polynesian Melanes an Micronesian

Dravidian

Tamil Telugu

215

# Language Family List Used by the National Register—Continued

# Dravidian-Continued

Malayalam Kannada Dravidian, other

# American Indian

North American Indian Navaho

# American Indian-Con.

North American Indian-Con. North American Indian, other Central Am. ican Indian, including Uto-Aztecan South American Indian

Guarani Quechua South American Indian, other

# Caucasian

Georgian Caucasian, other

# Miscellaneous

Papuan-Australian Creoles and Pidgins Other languages not included in any of the above categories



# APPENDIX E

# Foreign Area List Used by the National Register

United Arab Republic (Egypt) Northern Africa Algeria Canary Islands Ceuta Ifni Libya Morocco  Africa, Central Angola Cameroun Cameroun Central Africa Republic Congo Fernando Po Islands Gabon Ceutae Gabon Guinea Spanish China, including Hong-Kong Macao Manchuria Sinkiang Tibet Southeast Asia	Northern Africa Algeria Canary Islands	Angola Cameroun	Hong-Kong
Northern Africa Algeria Canary Islands Ceuta Ifni Libya  Angola Cameroun Cameroun Central Africa Republic Congo Fernando Po Islands Gabon  Hong-Kong Macao Macao Sinkiang Sinkiang Tibet Southeast Asia	Northern Africa Algeria Canary Islands	Angola Cameroun	Hong-Kong
Algeria Canary Islands Ceuta Cifni Libya Cameroun Central Africa Republic Congo Fernando Po Islands Gabon  Cameroun Macao Manchuria Sinkiang Tibet Southeast Asia	Canary Islands	Cameroun	, -
Canary Islands Ceuta Cifni Libya Canary Islands Congo Fernando Po Islands Gabon Central Africa Republic Congo Sinkiang Tibet Southeast Asia	Canary Islands		Macao
Ceuta Congo Sinkiang Ifni Fernando Po Islands Tibet Libya Gabon Southeast Asia	Couto	Central Africa Republic	
Ifni Fernando Po Islands Tibet Libya Gabon Southeast Asia	<b>∪euva</b>		
	Ifni	ı	1
Morocco Guinea Spanish Burma	Libya	Gabon	Southeast Asia
duniea, Opanish During	Morocco	Guinea, Spanish	Burma
Rio de Oro Portuguese West Africa Cambodia		Portuguese West Africa	Cambodia
Sahara, Spanish Rio Muni Laos	Sahara, Spanish		Laos
Tangier Ruanda-Urundi Malaya		Ruanda-Urundi	Malaya
Tunisia Spanish Equatorial Region Singapore		Spanish Equatorial Region	Singapore
Africa, East Central Africa, East South Central Thailand (Siam)	•	Africa, East South Central	Thailand (Siam)
Eritrea Basutoland Vietnam		·	Vietnam
Ethiopia (Abyssinia) Bechuanaland Indian Subcontinent		Bechuanaland	Indian Subcontinent
Mali British South Africa Afghanistan	<del></del>	British South Africa	
Mauritania Comoro Islands Andaman Islands		Comoro Islands	Andaman Islands
Somalia Kenya Bhutan		Kenya	Bhutan
Somaliland, French Malagasy (Madagascar)  Ceylon		Malagasy (Madagascar)	Ceylon
Mozambique Damao			
Nyeseland Diu		• • • • • • • • • • • • • • • • • • •	
Pombo Constituisti Pombo		· ·	
Cape verue islands India			
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		_	
		-	
Tropat			•
Ghana (Gold Coast)  Rhodesia, Northern  Pakistan		-	
Guinea Rhodesia, Southern Portuguese India		_	
Guinea, Portuguese St. Helena Seychelles Islands	· 1		•
Ivory Coast San Tome Japan, including			- · ·
Liberia Swaziland Okinawa	4	Swaziland	
Niger Tanganyika Ryukyus		Tanganyika	_ •
Nigeria Uganda Korea	Nigeria	Uganda	
Senegal Zanzibar Nationalist Chinese Islands	Senegal	Zanzibar	· · · · · · · · · · · · · · · · · · ·
SIPTER LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LACING LA	Sierra Leone	Africa, Southern	
Togo Republic of South Africa Philippines Northern Asia	Togo	•	
Upper Volta South-West Africa Arctic, Siberian	- I	<b>_</b>	-
West Africa, British Union of South Africa Kazakh (USSR)			•

# Asia—Continued

Northern Asia—Continued

Khirghiz (USSR)

Kuriles (USSR)

Sakhalin (USSR)

Siberia (USSR)

Tadzhik (USSR)

Turkmen (USSR)

Uzbek (USSR)

Mongolia

# Asia Minor

Arabian Peninsula

Aden

Bahrain

Kuwait

Muscat

Oman

Qatar

Saudi Arabia

Socotra

Trucial

Yemen

Iran (Persia)

Iraq (Mesopotamia)

Jordan, Lebanon, Syria

Israel (Palestine)

Turkey

Australia, New Zealand, and East Indies

Austrelia

Nauru

Norfolk Island

Papua

Tasmania

New Zealand

American Samoa

Cook Islands

Niue

Western Samoa

New Guinea and adjacent islands

Admiralties

British Solomon Islands

Fiji Islands

French Polynesia

Gilbert and Ellice Islands

Netherlands New Guinea

Australia, New Zealand, and East Indies—Continued

New Guinea and adjacent

islands—Continued

New Britain

New Caledonia

New Guinea

New Hebrides

New Ireland

Pitcairn Island

Tahiti

Tonga Island

Tokelau Islands

Indonesia

Bali

Bangka

Borneo

Celebes

Ceram

Flores

Halmahera

Java

Lombok

Soela

Sumatra

Sumba

Sumbawa

Timor

Portuguese Timor and Ambeno

Sarawak, Brunei, North

Borneo

Western Europe

Scandinavian Peninsula

Denmark

Faeroe Islands

Finland

Iceland

Norway

Spitsbergen

Sweden

Great Britain

Channel Islands

England

Hebrides

Ireland (Eire)

Isle of Man

Northern Ireland

Scotland

Western Europe—Continued

Great Britain—Continued

Shetland Islands

Wales

Benelux Countries

Belgium

Luxembourg

Netherlands

Germany

France, Corsica, Monaco

Austria, Liechtenstein,

Switzerland

Iberian Peninsula

.Andorra

Azores

Balearic Isles

Cibraltar

Madeira Isles

Portugal

Spain

Adriatic Islands

Aegean Sea Islands

Cyprus

Greece

Yugoslavia

Italy

Elba

Goza

Malta

San Marino

Sardinia

Sicily

Vatican City

Eastern Europe

Russia

Armenia (USSR)

Azerbaidzhan (USSR.) Bessarabia (USSR)

Byelorussia (USSR)

(White Russia)

Georgia (USSR)

Moldavia (USSR)

Ukraine (USSR)

Estonia (USSR)

Latvia (USSR)

Lithuania (USSR)

Poland

# Foreign Area List Used by the National Register-Continued

# Eastern Europe-Continued

Czechoslovakia Rumania Bulgaria

Hungary

Albania

# North America (except U.S.)

Canada and St. Pierre and Miquelon Islands

Greenland

Central America

British Honduras

Canal Zone
Costa Rica
El Salvador
Guatemala

Honduras Nicaragua

Panama

Mexico

# North America (except U.S.)— Continued

West Indies
Antigua
Barbados
Caicos Island

Cayman Island Grenada

Grenada Grenadines Jamaica

Leeward Islands
Netherlands Antilles
Trinidad-Tobago
Turks Island
Windward Islands

Bahamas
Bermuda
Guadaloupe
Martinique
Puerto Rico
Virgin Islands
Cuba

Dominican Republic

Haiti

# South America

Argentina and Paraguay

Brazil

Bolivia, Chile Colombia

Ecuador, Galapagos Islands, Peru

British Guiana, French Guiana, Surinam (Dutch Guiana)

Uruguay Venezuela

# Miscellaneous

Antarctica, Falkland Islands

Arctica

Midway Island

Pacific Islands not elsewhere

classified

Atlantic Islands not elsewhere

classified

Indian Ocean Islands not else-

where classified

Other islands not elsewhere

classified

International Waters